DOCUMENT RESUME

ED 291 161 EA 019 918

AUTHOR Keough, Katherine E.
TITLE Scenario 2000: Intercepting the Future.
INSTITUTION National Association of State Boards of Education, Alexandria, VA.
PUB DATE 86
NOTE 44p.
AVAILABLE FROM Publication Sales, National Association of State Boards of Education, 701 North Fairfax Street, Suite 340, Alexandria, VA 22314 ($10.00).
PUB TYPE Information Analyses (070) -- Viewpoints (120)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Dropout Prevention; Drug Abuse; Educational Policy; *Educational Responsibility; *Educational Trends; Elementary Secondary Education; Family (Sociological Unit); Family School Relationship; Finance Reform; *Futures (of Society); High Risk Students; *Long Range Planning; Problem Solving; School Demography; School Statistics; *Social Change; Sociocultural Patterns; Student Needs; Suicide; Teacher Supply and Demand; Technological Advancement

ABSTRACT

This monograph (developed along with an accompanying slide presentation) is designed to stimulate the creative thinking of educational policymakers in response to the massive and rapid social upheavals occurring in the economy and at home--and consequently among the students themselves. After a brief introductory overview of these changes and their implications for education, part 2 presents and discusses pertinent statistical information on the new realities: changing populations and enrollment, new definitions of family, and the world in which students live. The latter discussion focuses on statistics with respect to the dropout rate, alcohol and drug abuse, and teen suicide, while the final discussion, "Where Are the Teachers?" documents the growing gap between supply and demand for teachers. Part 3 provides a series of strategies and model programs for responding to these new realities. The first discussion focuses on student problems: keeping "at risk" students in school, curbing drug and alcohol abuse, and addressing the issue of teen suicide. Subsequent discussions focus on early childhood education, some hopeful indications for teacher supply, the promise of computers and technology, cooperation between schools and business, parents' involvement, and educational finance reform. A bibliography is included. (TE)

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SCENARIO 2000: INTERCEPTING THE FUTURE

BY
KATHERINE E. KEOUGH

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NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

SCENARIO 2000: INTERCEPTING THE FUTURE

BY
KATHERINE E. KEOUGH

National Association of State Boards of Education
701 North Fairfax Street, Suite 340
Alexandria, Virginia 22314

Photographs by David C. Snyder,
Office of Public Affairs, U.S. Department of Education

Special thanks also to Beverly Blondell

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FOREWORD

The last three years brought about great challenges and changes to public education. State boards of education and other educational policymakers have taken advantage of the renewed public interest by enacting new measures and pressing forward with initiatives already underway.

But we would be wrong to assume we have solved the problems before us. The pressures of economics, the interest of the public and special groups, the changing and shifting population, and the national debate over the role of education in our society will continue to place demands on policymakers.

Many challenges have been met; yet the only certainty, it often seems, is further and more rapid change. *Scenario 2000: Intercepting the Future* is our attempt to review these new realities and explore ways to respond to them. The issues raised in this publication need to be addressed today, for the graduating class of the year 2000 will be entering kindergarten next fall. State boards of education must respond quickly and appropriately to develop policies that promote excellence in and assure equal access to education for all students.

NASBE gratefully acknowledges the work of Dr. Katherine Keough for her data collection and writing of this report. We are proud to bring this information from a variety of resources and place it in the hands of people entrusted with setting school policy. We trust this publication will help you continue your efforts to improve the quality of our nation's public schools.

Phyllis L. Blaunstein, Executive Director
National Association of State Boards of Education

PREFACE

If there is one word with which we must all live today, it is "change." And two places where change has never been more dramatic is in the workplace and the structure of the home — two elements of critical importance to education.

Technology and foreign competition have created upheaval in our industrial economy — eliminating whole classifications of jobs that have sustained American workers for a century or more, while at the same time creating demands for workers educated to whole new levels of competence. We find ourselves in a paradoxical situation where there is increased need for a high school diploma (backed by sufficient standards to assure good basic and general employability skills) and decreased demand for a bachelor's degree, but a growing requirement for additional — even lifetime — education between these two levels. The evidence is irrefutable that entering the workforce with less than a high school diploma is virtual assurance of a life of closed opportunities and hard times.

Similarly, the dramatic rise of two-income, single parent, and childless families has altered the traditional concept of family, and in the process altered public expectations of education. Astounding social pressures on teens manifest themselves in such devastating results as dropping out, pregnancy, drug abuse and suicide. Education must understand this social upheaval and then learn how to cope with and overcome it.

This monograph and the accompanying slide presentation are designed to help build this awareness and stimulate the creative thinking of educational policymakers. Your task has never been more important.

There are a number of people I need to thank for bringing this project from concept to reality. A fine research team of Allen Alexander, Judy Barokas, Charles Genrich and Fran Rensbarger assembled an impressive array of material ranging from pure demographics to esoteric educational theory. I then tried to distill this into a useful document. Maria Estevez applied her fine eye and artistic talent to the creation of this handsome publication.

With the help of The Communications Support Group, Inc., of Ithaca, New York, and in particular its president Charles Brodhead, we have developed a slide presentation (done entirely with computer graphics and many of which are reproduced in this book, by the way) to set the scene for informed public discussion about the issues facing education and the appropriate responses. And finally, I would be remiss in not mentioning Dr. Susanna W. Pflaum, Dean of the School of Education at Queens College, CUNY, and Dr. Corinne J. Weithorn, Chairperson of the Department of Education and Community Programs at Queens College, CUNY, for their encouragment and recognition of the importance of publications of a practical nature for educators and policymakers.

Katherine Keough
Assistant Professor, Queens College, CUNY

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PART I
INTRODUCTION

SCENARIO 2000: INTERCEPTING THE FUTURE

"If America wants its Social Security checks to keep being paid in coming years, it had better ensure full opportunity and productivity for minorities and women."

Robert B. Hill, former Director, National Urban League

Mr. Hill might better have stated his compelling thesis: "If America wants its Social Security checks to keep being paid in coming years, it had better ensure full opportunity and productivity for all working age citizens, but most particularly minorities and women."

Our nation's educational agenda cannot be more succinctly stated.

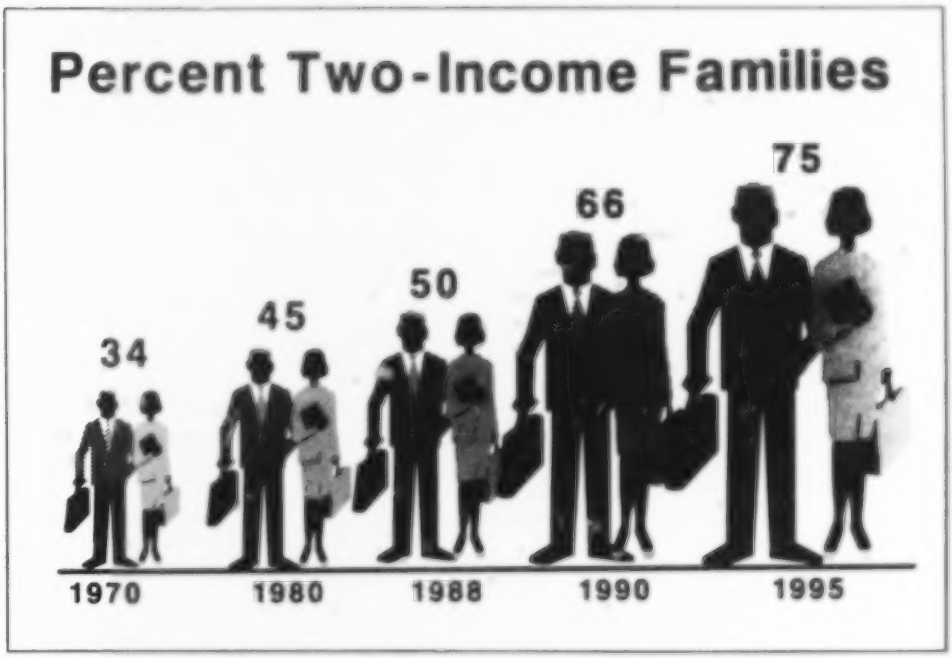
Marketplace Realities

The massive change in our economic structure is much publicized. American industry is struggling to deal with the realities of the marketplace. Foreign competition has brought entire industries — steel, rubber, appliances — to their knees. Other industries — autos, publishing, communications — are racing madly to increase productivity by replacing people with robots, computers, and other high tech machines in order to remain competitive.

As we de-industrialize and move to an economy dominated by the service and information industries, the nature of the job market is undergoing enormous change. While these new industries are creating new jobs — many of them professional, highly skilled, or technical — they cannot offset the loses in our traditional industries. Estimates are that for every such job created, somewhere between 3 and 10 others disappear because of foreign competition and automation.

Millions of high wage skilled workers have been dislocated. Some have been retrained and absorbed into a well paid technical cadre of workers. Others have been "de-skilled" into lower paying, less demanding jobs. Still others have remained on welfare, retired early, or found other means of survival. And all of this has been occuring at a time when women entered and re-entered the labor force in unprecedented numbers.

Social scientists, however, are beginning to fear we are in danger of losing our middle class. Some see us moving to a kind of socio-economic caste system with a small group of professional-technical elite working at very rewarding and fulfilling jobs, while the vast majority labor in low-level, low-paying routine tasks. As evidence, they point to the boom in the service sector.



The continued growth in two-income households will create demand for an ever-increasing array of services.

Two Mitigating Factors

There are two factors, however, that mitigate against this scenario. First, many students of economic development believe the current explosion of low-paying, low-skilled jobs, is a temporary phenomenon. These observers point out that current and planned huge investments in the electronic infrasturcture are bound to create new markets for as yet only imagined information products and sophisticated commercial services. This in turn will accelerate the creation of higher paying technical and professional jobs which will absorb many of those displaced skilled workers who entered the service sector as an employer of last resort. The service economy, then, can be looked upon as a temporary holding area for a large group of potentially productive technical workers who are awaiting further progress in the country's "techno-economic revolution."

But as this "revolution" takes place, it will not reduce the demand for service workers. The continued growth in two-income households will see to that. They have created demand for an ever-increasing array of services. And the end is not yet in sight. Currently slightly more than half of all families have two wage earners. Projections are that this will increase to two-thirds by 1990 and almost three-fourths by 1995.

The second factor that is likely to offset this high tech/low tech societal split is the entry into the job market of the "baby bust" generation. As with the "baby boom" group that preceded it, the "baby bust" is also leaving its mark on our society. We built schools to accommodate the baby boom, we've closed them because of the baby bust. Our job market expanded rapidly to absorb the hoards of baby boomers and females. The availability of such a generous labor supply contributed to the rapid growth of the service sector. It also tended to hold down entry level wages and keep marginally employable persons on the unemployment roles.

By 1995, however, the young adult population, (16-24) which comprises the major portion of our new labor supply, will have *shrunk a full 25 percent* from its 1981 numbers. The expected result of this contraction is an increase in entry-level wages, a further influx of women into the work force, and expanded employment opportunities for minorities. Predictions are that by 1995 women will make up 47 percent of the nation's workers (up from 44% in 1984) and minority representation will rise from a 1984 level of 10 percent to 14 percent.

We are already seeing the effects of the entry level labor shortage in the rapid growth suburbs. Many fast-food restaurants, traditional employers of youth, are forced to rethink their minimum wage policies. Fortunately the same search for youth employees is alleviating the very high rates of joblessness in the slums. Since 1983, the unemployment rate among black teenagers dropped 10 percentage points. However, it still remains at an unacceptable 39 percent — more than double that for white teenagers.

Implications for Education

These marketplace realities have some major implications for education. For one thing, American education may be in danger of playing into the hands of the appalling "caste-system" scenario outlined above. On the one hand, academic requirements for the college bound are being increased; on the other hand, we are either forcing students into the upgraded college-bound mold who don't want to and/or shouldn't be there, or we are upgrading their general education curriculum with "computer literacy" and leaving it at that.

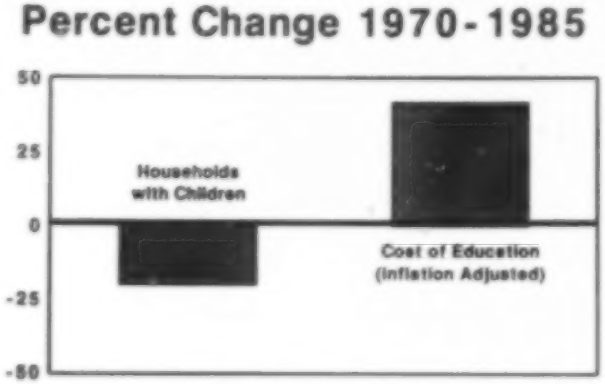
Another reality is the pressure being put on education by business and industry to produce a labor force that is better prepared for the world of work and to retrain the current pool of available workers. Many surveys indicate that industry is not happy with the current product. A recent report from the National Alliance of Business said that 40 percent of 17-year olds cannot draw conclusions from written facts and 66 percent cannot solve multiple step math problems. While it is true employers will continue to reduce their labor requirements through automation, there are few who believe technology can offset the anticipated labor shortage. It is a fairly safe bet that if education does not respond to this challenge, industry will do the job itself.

A 1982 survey for the Congressional Joint Economic Committee sought to determine the factors high-tech industries considered most important in locating a new plant. The number one consideration, the survey found, was the availability of technical, professional and skilled labor. The availability of technical workers was important to 96 percent of the respondents. Such traditional industrial siting criteria as availability of water and waste treatment facilities, and proximity to raw materials and markets were significant factors in the view of less than half the firms surveyed.

Other employer surveys consistently highlight the complaints of business and industry against education, pointing out that as many as half of all new employees lack the most basic of skills necessary to function productively — spelling, grammar, and simple arithmetic. Other studies have identified the distressing fact that fully 20 to 30 percent of American adults are not "functionally competent" enough to effectively handle their own daily lives.

Prior to 1960, a majority of households in America contained school or pre-school age children. These were school tax paying households with a direct vested interest in good schools. Today, just 36 percent, a mere 1/3, of America's households have children in them — an alarming erosion of education's traditional base of support. It is obvious that education must broaden its appeal and seek stronger alliances with business and industry, if it is to survive and flourish.

It is instructive to note that from 1970 to 1985 the proportion of households with children *fell* 20 percent while the inflation adjusted cost of education *rose* 42 percent.



From 1970 to 1985, the proportion of households with children fell 20 percent while the inflation adjusted cost of education rose 42 percent.

Education's Product and Productivity

This rising cost of education brings forth another factor with which education must contend — its own productivity. As industry is constantly fighting the productivity battle, so must education. A great deal of research exists which indicates that such factors as the integration of modular curricula, electronic teaching, workplace learning, and home computers are likely to dramatically alter the delivery of education in and out of our schools. The indicators are that strategies such as these have three to four times the potential to increase educational effectiveness as such time honored solutions as increased class time and decreased class size.

Marketing studies indicate that by 1990 fully one-half of all American homes will own a computer and by 1995 this figure will reach two-thirds. It is reasonable to assume that educators will be foremost among these computer owners. Furthermore, it is estimated that sales of educational software will exceed text book sales within five years. It behooves education to encourage and facilitate the acquisition of computer skills by all of its professionals. It is also important that education not lose sight of the one-third of our population that runs the risk of being "education poor" because they do *not* own a computer.

The job at hand for K-12 education, many educators believe, is to prepare our youth for the opportunities of a lifetime of change. Labor experts now estimate that few jobs will remain the same for longer than five years. It is imperative that our children *graduate* from high school with the knowledge and the skills to pursue not a single career, but a series of careers, and with the expectation that they face a lifetime of learning.

Vocational education will play an increasingly important role. It is the focus of the workplace learning component which education must develop and voc. ed. must be seen as an integral part of the total educational delivery system, not as an adjunct to it. Too often vocational education is seen as a dumping ground — "for those who can't do anything else" — rather than as a very productive method of *educating* young people to function in the realities of the marketplace as highly productive and contributing citizens. And only rarely is voc. ed. viewed as an appropriate path into college, when for many children indeed it is — but in their own time and in their own way.

And when we look at vocational education — particularly at the secondary school level — in this broader context, we can see that we must stop evaluating it purely on the basis of how many young people get jobs in fields related to their education. When viewed on a wider scale of "success," we then can see many other very positive outcomes, including the child who finishes a high school vocational course and concludes he or she is no longer interested in that field. This is a lesson much better learned in high school than in college. And the child still has many of the general employablity skills that industry so desperately wants and that all good vocational programs teach.

Furthermore, labor market forecasts consistently indicate that only about 20 percent of the future jobs will require a bachelor's degree. Most of the rest, 50 to 75 percent, will require some form of secondary and/or post-secondary technical education.

Education therefore must give to today's students a broad range of general purpose, or general employability, skills — skills that are transferrable, that can be carried from job to job. These include such process skills as reasoning and inter-personal relations as well as math, communications, attitudinal, and aptitudinal skills.

This is the challenging context of American education. It is a context that is likely to propel education past medicine and health care as our country's largest industry. *The social, economic and political dislocations created by an increasing pool of uneducated Americans will color every political debate, exacerbate every thorny economic problem, and compound every difficult social issue we have to face as a country. There is no force more destructive to our democratic underpinnings as a nation than an uneducated citizenry.*

- Fact — in our major urban areas, 50 percent of the entering high school freshmen will fail to graduate.
- Fact — in Washington, D.C., 90 percent of the prison population has not finished high school.
- Fact — on average, it costs more to keep a person in prison than it does to send someone to college!

Lets look more closely at some of the forces with which American education must contend.

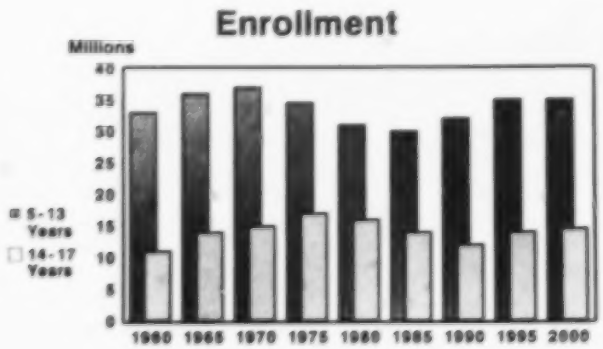
PART II
THE NEW REALITIES

A. CHANGING POPULATIONS AND ENROLLMENTS

When school bells rang for the opening of schools in the fall of 1986, some 45.3 million public and private elementary and secondary students entered the hallways. They are the early wave of a baby boomlet that the schools can anticipate as a result of birth increases that began in this country in 1977.

Overall Enrollments Up and Down

The Department of Education's Center for Statistics noted that public and private *elementary* school enrollments this fall *rose* to 31.6 million compared with 31.2 million in the fall of 1985.



Elementary school enrollments this fall rose 400,000 while secondary enrollments fell 200,000.

In *secondary* schools, the number of students in public and private schools (grades 9-12) *fell* to 13.7 million this fall compared with 13.9 million a year ago.

The Center noted that the 1987 high school graduating class from public and private schools is expected to total 2,720,000 compared with 2,650,000 in 1986 — the first year of a three-year bump in an otherwise steadily decreasing number of high school graduates for the next decade.

The baby boomlet is not evenly distributed throughout all the states. Dramatic regional differences in enrollment patterns can be expected for the remainder of the century. It would appear that in the Northeast and Midwest, the baby boomlet will be little more than a transitory blip. By the end of this decade, kindergarten enrollments in these regions will increase by 13 percent only to decline by the same amount in the 1990s.

By contrast, school enrollment in the West can be expected to continue to expand at all grade levels for the remainder of this century.

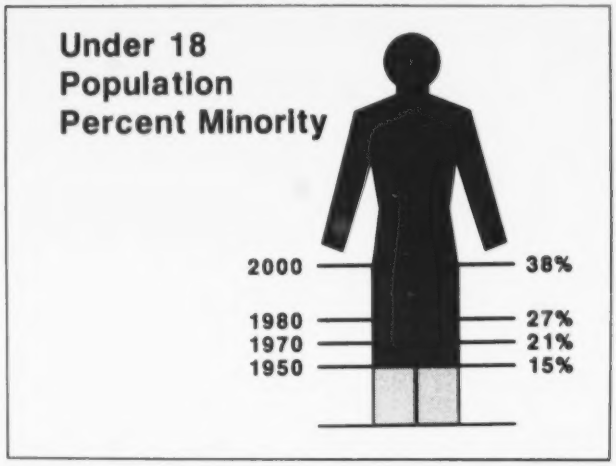
Except for Florida and Texas, — which show patterns of growth like that of the West — the South mirrors the Northeast and Midwest patterns of growth and decline.

In short, although each region and state will display its own unique characteristics, most school districts in the Northeast, South and Midwest will experience enrollment fluctuations not unlike those of the past two decades: increases followed shortly

thereafter by declines, though the peaks and valleys will be less extreme.

Minorities Increasing

The racial composition of our public schools reflects the changing picture of America. In 1950 less than 15 percent of our under-18 population was black, Hispanic, Asian, or American Indian. In 1970 this figure was 21 percent. By 1980 it had grown to 27 percent and it is projected that minorities will total 38 percent of the under-18 population by the year 2000.



In 1950, less than 15 percent of our under-18 population was minority; it is projected that they will total 38 percent of this population by the year 2000.

California now has a majority of minorities in its elementary schools, and in Texas 46 percent of elementary students are black and Hispanic. In our 25 largest school systems, the majority are minorities.

Private Schools on the Rise

Private schools seem to be playing an increasingly significant role in American education. Between 1970-71 and 1985-86, when public school enrollment fell approximately 5-1/2 million students, private schools gained 350,000. Private school enrollments are dependent on many factors, including the perceptions of parents as to the efficacy of their local public schools.

In a policy perspective paper issued last year, Stanford University's Institute for Research on Educational Finance and Government (IFG) said:

"There can be little doubt that the diversification and expansion of private education in the U.S. signals a change. The non-Catholic private sector grew by over 87 percent in the last 15 years, with an overall jump from 795,453 pupils to 2.2 million in 1983, an increase of 179 percent. This growth shows a vigor at the local level, since many or most of these schools are the result of grassroots community and family effort..."

The IFG paper, written by Bruce S. Cooper, professor of education at Fordham University, continued:

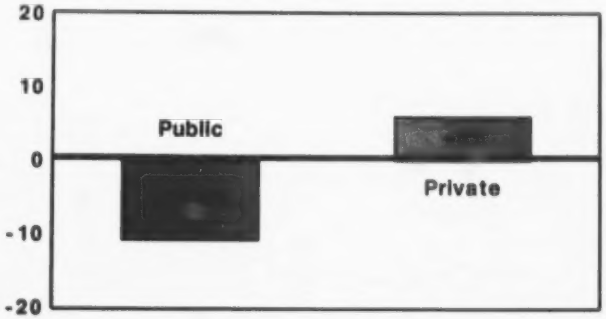
"This new-found diversity means many more families have local options" for their children's religious, social and academic education "and families will pay for those things if the local public schools cannot supply them. Furthermore, if the private sector grows at its present rate, by 1990 it will enroll 15 percent of all elementary and secondary school students. It will become more difficult for elected officials in Washington, D.C., and the state capitols to ignore the needs of private schools...As private schools gain political clout and go to court, the law may be changed or reinterpreted to accommodate the needs of these schools."

Private schools now pervade the land; Christian academies are in small inland towns where no one heard of private education 20 years ago. Some kind of private school now exists in virtually every town over 10,000 population.

Roman Catholic schools, which suffered substantial closings starting in the mid-1960s, still continue by far as the largest group of private schools and probably have about 55 percent of private school enrollment. Cooper's figures show they had a high of 5.6 million students in 1964 and fell to 2.97 million in 1984.

They apparently have stabilized, however. Cooper reports there were only 31 fewer Catholic schools in 1983-84 than the previous year and only 58,000 fewer students. This decrease was caused mostly by the closings of inner city schools and had been more than offset by gains in enrollment in other private schools.

Public / Private Enrollment
Percent Change 1970-71 to 1985-86



Between 1970-71 and 1985-86, when public school enrollment fell approximately 5.5 million students, private schools gained 350,000.

The Council for American Private Education (CAPE), the umbrella organization for most private schools, reports that the members of the Association of Christian Schools International increased its enrollment from 186,000 in 1978 to 390,000 in 1984; the American Association of Christian Schools reported 90,000 students in 1977, 150,000 in 1980 and 175,000 in 1984.

Some other key factors which determine whether families will send their children to private schools:

- The economy — parents have to pay tuition.
- Birth and family patterns — more children in a family generally means less discretionary money for schooling; late marriages generally mean lower birth rates and higher family income.
- Religious values — many parents want their children taught religious ethical values in school.
- Meeting the needs of the individual child — this, and the teaching of values, usually are emphasized by private schools.
- Caliber of the public schools — private schools do not seem to flourish when local public schools do a good job of meeting the perceived community needs.

B. NEW DEFINITIONS OF FAMILY

"The decline of the traditional American Family constitutes perhaps the greatest long-term threat to our children's well-being...Take one of the parents out of the home and the educational health of the child is likely to suffer."

William Bennett, Secretary of Education

These are words from a recent speech by Secretary Bennett, himself the son of divorced parents whose mother raised two children alone. Bennett spoke in advance of the release of a report by the presidentially-appointed *Working Group on the Family*.

Whatever the impact on the child's well-being, there can be little dispute that during the past three decades there have been revolutionary changes in the American family. Some of the problems, challenges and implications of these changes can be seen clearly; others are only dimly perceived. What these trends, if they continue, mean for the future — the year 2000 —and their implications for America's schools — their quality, curriculum, political and financial support — are profound.

- In 1955, 60 percent of the nation's households had a mother, father and two or more school-aged children;
- In 1986, the 60 percent figure fell to an estimated 11 percent. In short, *married couples* with school-aged children have become the exception.

The Census Bureau announced that the percentage of mothers returning to work in the first year after childbirth increased from 31 percent in 1976 to 48 percent in 1985.

The Joint Economic Committee of Congress reports that mothers joining the work force at the fastest rate are from two-parent households. This is a significant change. In the past, single or divorced mothers led in these statistics.

Childless and Single Parent Families

In 1970, 84 percent of children under 18 lived with two parents; in 1984, only 75 percent. In 1970, 12 percent of children under 18 lived in one-parent families; in 1984, the figure was 23 percent — almost double.

The litany of figures and percentages about family trends is quite well known; some of the more current figures add weight and dimension to these trends. We now see approximately one divorce for every two marriages. One million couples, about four times the number in 1970, live together without being legally married.

Some 60 percent of women with school-age children under 18 and 43 percent of married women with children under six work outside the home.

The median age for first marriages in 1984 was 23 for women, the highest since the Census Bureau began recording such data in 1809. For men, the median age currently is 25, one year shy of its turn of the century high. In 1981, the number of married, childless couples surpassed the number of married couples with children for the first time. By 1985, childless married couples numbered 26 million.

Living with one parent is becoming commonplace for today's child. Single parent families include:

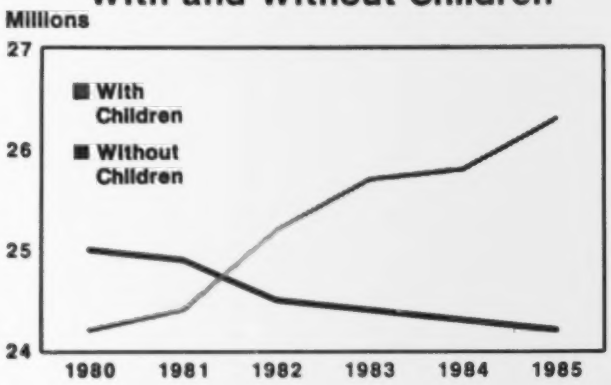
- More than 50 percent of all black children;
- 25 percent of all Hispanic children;
- 16 percent of all white children.

Of today's 3-year-olds (children born in 1983), 6 of 10 will live with one parent before turning 18.

Of the more than 14 million children (23 percent of the total) now growing up in one-parent families, 9 of 10 live in families headed by single females. The family situation of these mothers shows that:

- 36 percent did not complete high school;
- 62 percent of the families have incomes under $10,000;
- 42 percent live in central cities;
- 24 percent of the children were born out of wedlock.

Married Couples With and Without Children

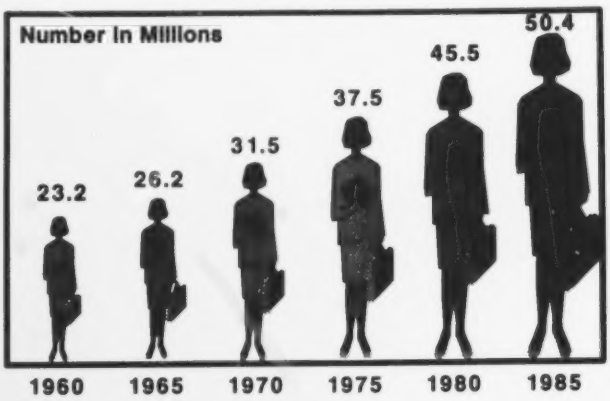


In 1981, the number of married, childless couples surpassed the number of married couples with children for the first time.

By age 20, two out of ten white females and four out of ten black females have become mothers. 26 percent — or one out of four —of all first births are to mothers under age 20. Blacks account for about 15 percent of the teenage population and approximately half of all births to teens. However, the overall birth rate for black teenagers is declining while the birth rate for whites is increasing. The figures for children born to teens out of wedlock are even more startling. Nearly four out of ten teen births to white women are out of wedlock. For black teen mothers, almost nine out of ten are unmarried.

Teen mothers through their lives have lower educational achievement, higher unemployment rates, and lower family incomes than do women who choose motherhood later in life. There seems to be a depressing domino effect that afflicts these very young mothers and their children. Teens are

Growth of Women at Work
1960 - 1984



far less likely to obtain prenatal care than older mothers. Perhaps as a result, their children are more likely to be born both preterm (20 percent of the nation's premature babies have teen mothers) and small. The likelihood of handicapping conditions is closely associated with low birth weights, thereby increasing special educational needs throughout their school years.

Half of all teenage mothers drop out of school and never return. Teenage fathers are about 40 percent less likely to graduate than peers who do not father children.

Some Work Force Data

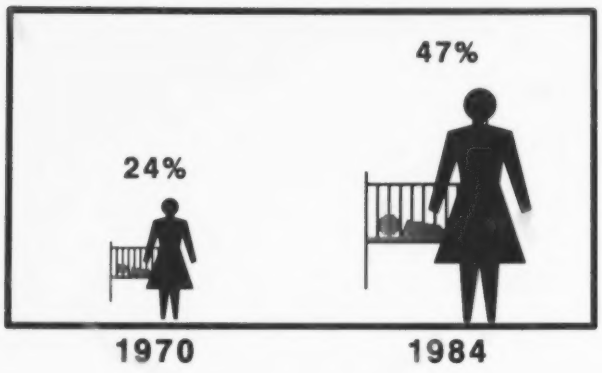
In March, 1985, according to the U.S. Department of Labor Bureau of Labor Statistics, half of all mothers of children under 3 were in the labor force — up from one-third in 1975. For those whose youngest child was 3-5, the proportion was 60 percent compared with 45 percent a decade earlier.

The total number of mothers in the labor force with children under the age of 6 increased by nearly 200,000 to reach 8.2 million last year. Another 8 million mothers, or 70 percent of those whose youngest child was between 6 and 13, also were in the labor force; many of these children require some form of care before or after school in the absence of their mothers.

- Black mothers are more likely than white mothers to be in the labor force, but the gap is narrowing;
  - Ten years earlier there was a 13 percentage-point difference in labor force participation rates for mothers of pre-schoolers; last year the difference was 5 points;
  - For mothers of children 7-17, the gap narrowed to insignificance compared with a difference of 13 points 10-years earlier;

Working Mothers

Child Under 1 Year Old



- Over half of the 45.6 million children in two-parent families have both parents in the labor force. The proportion is highest among 14 to 17-year-olds (63 percent) and lowest for preschoolers (49 percent);
- About 12.8 million families were maintained by persons living without a spouse — 10.5 million by women and 2.3 million by men;
- Compared with families maintained by men, families maintained by women were more likely to have children under 18 and less likely to contain a wage-earner.

Crisis in Foster Home Care

In 1977, there were 594,000 children in foster care homes throughout the nation — homes providing shelter for homeless, neglected, abused and disabled children whose parents could not or would not care for them. According to the U.S. Department of Health and Human Services (HHS), by 1984, the number of foster homes dropped to 187,680.

"It's a genuine crisis" situation, according to a spokesman for the National Foster Parent Association in Houston. "I get calls and letters from every state asking how we can get foster parents and keep them, because we are losing them at a terrible, terrible rate." Others have observed that today's foster children are older than in previous years and less developed educationally and socially. As one veteran foster parent was recently quoted, "Now more kids are older and more confused. They don't talk; they've been sexually abused; they're handicapped."

Factors contributing to the decline in the number of foster homes include: more working women; reluctance to care for the growing number of severely disturbed children awaiting placement; food, clothing and housing prices that have outpaced foster parent compensation; liability insurance cost increases. (This past July, foster parents in California went on strike, refusing to take additional children until they receive government help to cover insurance costs.)

H. Gordon Evans, the Foster Parent Association spokesman, says, "I hope this is not signaling the return of the tall, red-brick building with a sign outside that says 'Orphanage.'"

Others worry that a shift from foster care to far more costly institutional care will mean a bigger burden on taxpayers or reductions in spending elsewhere. HHS estimates $2.4 billion in state and federal funds were spent on foster care last year.

Growth of Seniors Population

At the other end of the age spectrum, there are increasing numbers of families who care for older parents whose life expectancies are soaring:

- A male child born 3 years ago has a life expectancy of 76 years; this compares with a life expectancy of 65 years for a male born 30 years ago;
- A female child born 3 years ago has a life expectancy of 78 years compared with 71 years for a woman born 30 years ago;
- In 1900, there were only 13,000 Americans over 85 years old;
- In 1985, there were 2.7 million Americans in this "old old" category;
- By the year 2000, it is projected that the 85-plus population will almost double to 5 million.

As old age is stretched out, we can expect to see increasing numbers of senior citizens needing services and care for the infirmities of old age. The impact on families is already being seen with the appearance of the American "superwoman" caring for her family and children, working outside the home, and caring for her parents. It is a split in responsibilities that is becoming ever more common to women 45-65 years of age, causing them to be called the "sandwich generation."

One authority, Elaine Brody of the Philadelphia Geriatric Center, says conservatively 5 million women are now caring for an elderly parent. A more realistic guess, she adds, is 8 to 9 million.

Perhaps the first national study of caretakers of *disabled* elderly persons not living in nursing homes was issued this past summer by the U.S. Department of Health and Human Services.

Based on a 1982 nationwide population sample, it found that 1.2 million disabled persons 65 or older were being cared for by 2.2 million others. Of the caregivers, 71 percent were women — 23 percent wives of the disabled; 29 percent daughters; and nearly 20 percent other females, including daughters-in-law, sisters, grandchildren, or friends. Sons were caregivers in 8.5 percent of the cases and husbands in 13 percent. The average age of those providing care was 57, a situation of the "young old" caring for the "old old," a time in the life of the caregiver when she was just beginning to see an end to the demands of family care.

Just as our society is beginning to make adjustments to give more flexibility to working mothers, it may have to begin making similar accommodations for our caregivers. Most likely, there will be stronger demands for public funds to provide such care, posing major competition for education in the allocation of these resources.

C. THE WORLD OUR STUDENTS LIVE IN

The social, economic and political dislocations created by an increasing pool of uneducated Americans will color every political debate, exacerbate every thorny economic problem, and compound every difficult social issue we have to face as a country. There is no force more destructive to our democratic underpinnings as a nation than an uneducated citizenry.

Katherine E. Keough, Assistant Professor Queens College, CUNY

THE DROPOUT

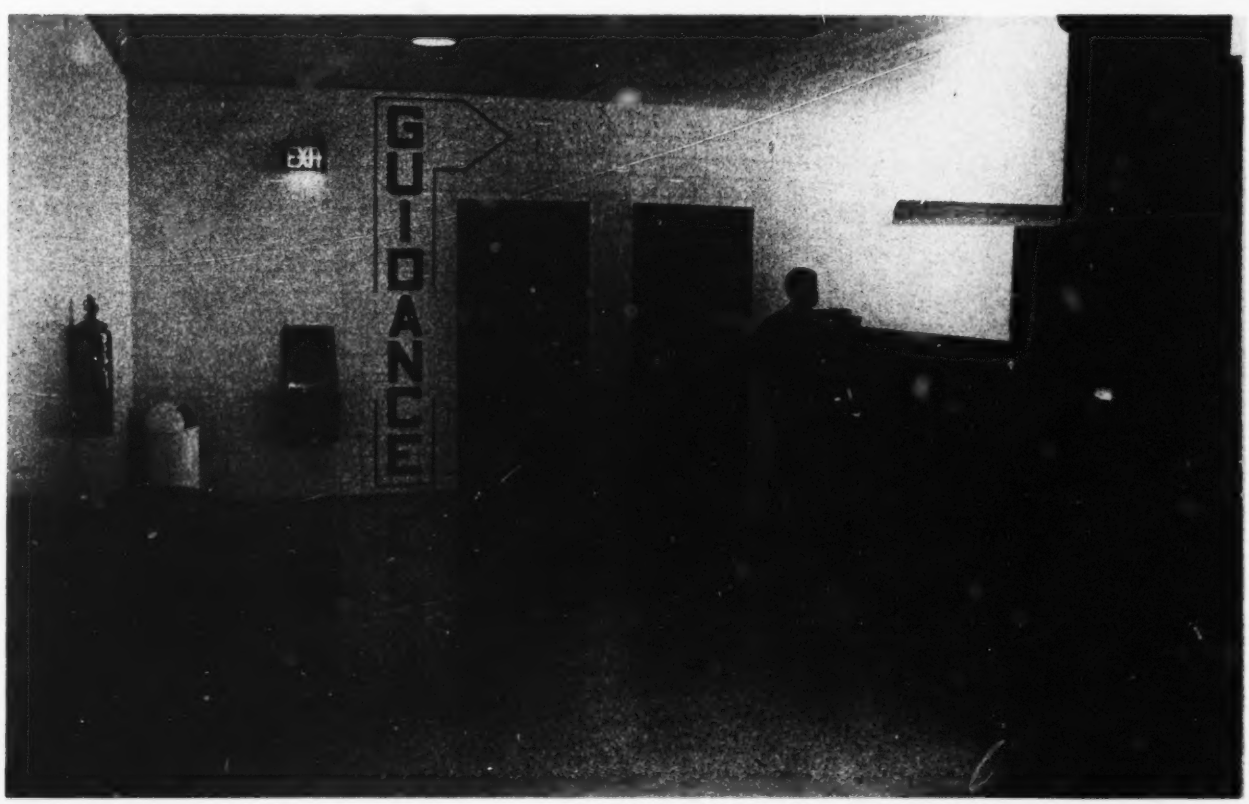
As all of our calendars target on the year 2000, it seems likely that a growing proportion of our nation's young learners will be poor, non-white, of limited English proficiency, and from families where the parents lack a high school education.

Many of these young people will become disinterested, disenfranchised and will dropout of school to face limited job opportunities. They will be "at risk" in our society and "a risk" to our nation.

Some Realities

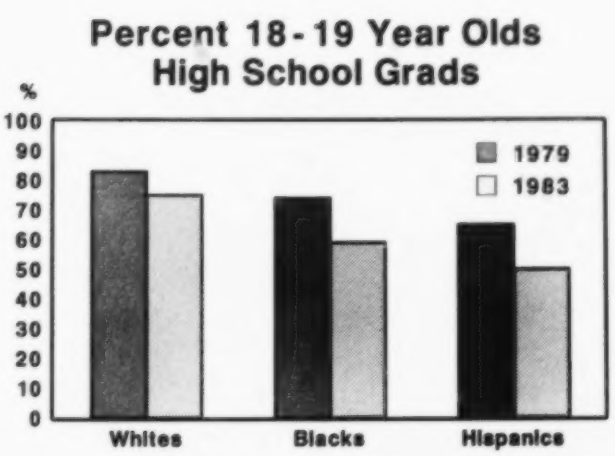
- In Stockton, California, daytime burglaries fell 30 percent when truancy laws were enforced and the kids were made to go to school;
- It costs as much per year to keep a person in prison as it does to send someone to college;
- It is far more expensive to pay for dropouts than it is to educate them;
- Ninety percent of the D.C. prison population did not finish high school;
- In the major urban areas, it is projected that 50% of the freshmen class will dropout by their senior year;
- In 1985, Boston reported that for the first time more students had dropped out of school than had graduated.

These harsh realities come just at the time when many school board members and educators are looking back over 75 years of hard work and of



great educational improvement and are about to pat each other on the back. For example, in America's agrarian society of 1900, only 1 of 10 students completed high school. Thus, at the beginning of this century, a high school education was the privilege of the few, not the standard practice of the many. By 1970, the dropout rate was approximately 18 percent, the lowest in our history. Today it is around 25 percent, but reaches almost 50 percent in most inner-cities. What happened?

In order to comprehend fully the strained relationship between the schoools and our current school-aged clientele, we need to focus on their world as well as ours. Both have changed dramatically.



In 1983, more than 75 percent of all white 18- and 19-year-olds were high school graduates, compared with slightly less than 60 percent of blacks, and 50 percent of Hispanics.

Dropout Profile

Dropouts have a common profile: usually they are from poverty settings, they have low basic academic skills, their parents are not high school graduates, a language other than English is spoken at home, and often they are the children of single parents. Typically, dropouts are alienated from school, perceive themselves as failures in the school, and find little of value in the school setting.

Males dropout more frequently than females, usually to get a menial job which doesn't last very long. When females become dropouts, it's usually to have a child. Minority children are far more likely than whites to drop out of school. In 1983, more than 75 percent of all white 18 and 19-year-olds were high school graduates, compared with slightly less than 60 percent of blacks, and 50 percent of Hispanics.

A 1979 Census Bureau study showed that 35 percent of Hispanics and 25.5 percent of blacks ages 18-21 had dropped out of school compared with 15.5 percent of whites of similar age. The schools appear to be losing ground.

According to the *Condition of Education, 1985*, there appears to be a reasonably consistent relationship between the dropout rate and family socio-economic status (SES). For whites, the dropout rate decreases steadily as socio-economic status increases. For blacks, no consistent trend emerges until SES levels increase dramatically. At high SES levels, black dropout rates decrease significantly. For Hispanics, the pattern more closely resembles that of whites, a generally declining dropout rate as SES increases.

According to Emily Feistritzer of the National Center for Education Information, high dropout figures are related to poverty, and to a large extent, poverty is related to minorities. But poverty in and of itself does not play the pivotal role; attitude about one's circumstances and future prospects remain important.

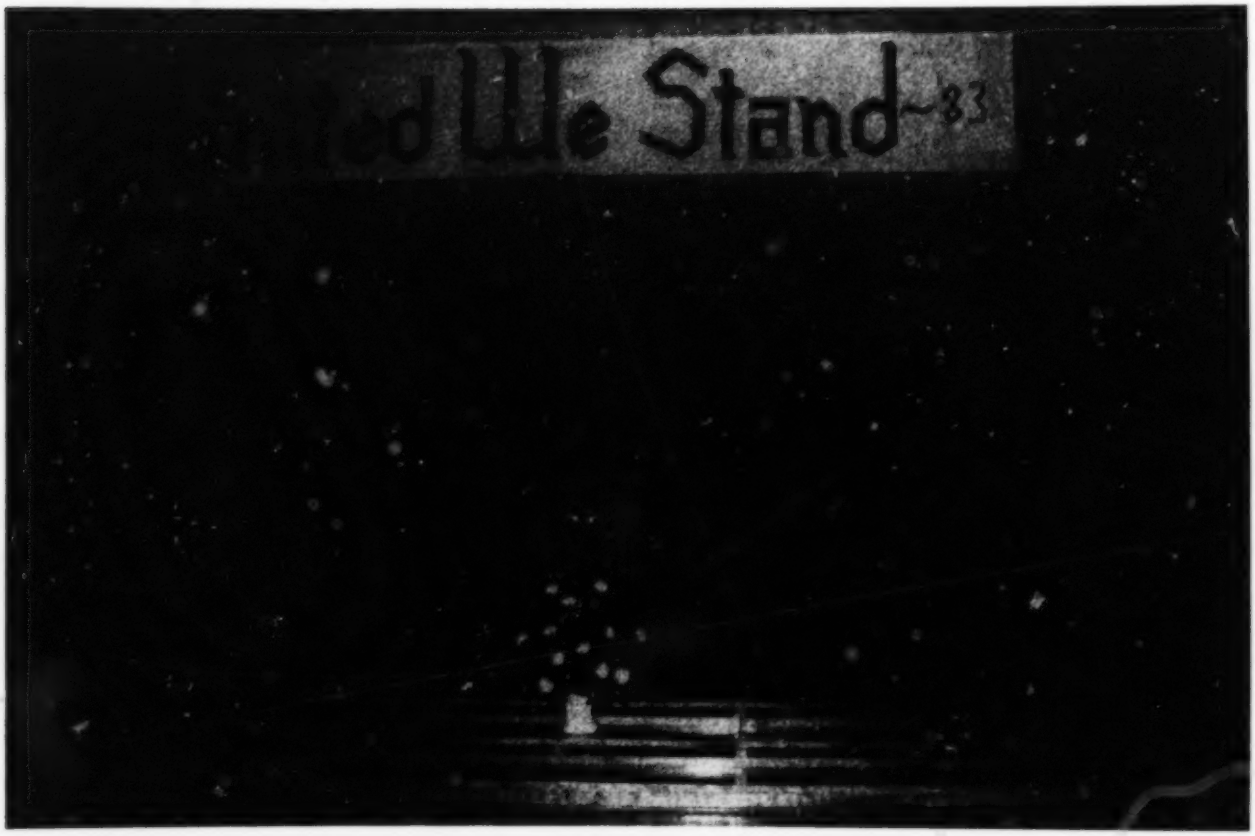
Behavioral experts point out that there is a significant attitudinal difference between whites who are poor and minorities who are poor. Whites often look upon themselves as down on their luck, lacking job requirements — in essence, believing they have some control over their destiny and that it's a temporary condition. They do not see themselves as victims being subjected to brutal unfairness and discrimination in the job market, which is the perception of the non-white.

The father's education plays an important role in the dropout picture. Dropout rates are about three times greater for students whose fathers have not graduated from high school as for students whose fathers are college graduates. The dropout rate decreases with each successive level of education, but the difference is especially pronounced between students whose fathers are at the lowest educational level and those with fathers at the next higher educational level. For students whose fathers did not complete high school, dropout rates were essentially the same across racial/ethnic groups.

The language spoken at home also appears to play an important role as an influencer of dropout rates. Bi-lingual Hispanics who spoke mostly English at home generally dropped out of school less frequently than those who spoke Spanish only.

An estimated 30 million people were non-English speakers in the United States in 1980, the figure is projected to grow 30 percent to slightly under 40 million by 2000.

Language, poverty, father's educational level, family cohesiveness and attitude all seem to be influencers in the profile describing the "at risk" dropout student.



High School Re-entry and Retention

While many dropouts leave school permanently, some re-enter school at a later time. About 10 percent of the high school sophomores who dropped out between 1980 and 1982 returned to school by the fall of 1982. Background attributes and test-score performances associated with *low* dropout rates tend to be related to higher-than-average re-entry rates. Some examples from the 1980 dropouts:

- Re-entry was one-fifth higher in the Northeast and North Central regions than the South or West;
- Among whites, re-entry rates in the West were one-third lower than in other regions;
- Among blacks, re-entry rates in the Northeast were substantially higher than in the South (14 percent vs. 6);
- Hispanic dropouts in the North Central region were three times more likely to re-enter school than those in the Northeast or West. Hispanics in the South were twice as likely to return to school as those in the Northeast or West.

Re-entry rates in suburban and rural communities were at least one-third higher than those in urban settings. Females in rural communities were three times more likely to re-enter than females from urban settings. In suburban communities, females were twice as likely to re-enter as those from urban communities.

For whites, re-entry rates in rural communities were higher (15 percent) than in urban areas (9 percent). For blacks, this trend was reversed: 10 percent of black dropouts in urban communities returned compared with 5 percent in rural communities.

A state that retains a high percentage of its youth until high school graduation has a high probability of that student remaining in the state and getting a job. The student, through the payment of taxes, reimburses the state for the cost of his education and is a net gain to the state.

A Johns Hopkins University Center for Social Organization of Schools study questioned whether getting dropouts to return to school and continue their education will provide automatic benefits for them. Researcher Michael Cook in the 1984 report on a sample of 203 primarily inner-city dropouts, observed: "The dropouts in our study who re-enrolled in school showed decreases in psychological health and interpersonal competency. This probably reflects the fact that they were returning to an environment that was previously so non-rewarding or punishing that they withdrew from

it. We don't interpret these data to mean that dropouts shouldn't return to school — the high school diploma may be valuable for later career success, if they can get it. But we do stress that dropouts who return to school suffer some negative psychosocial effects that the school must deal with if these returnees are to succceed in their second efforts."

ALCOHOL AND DRUG ABUSE

President Reagan has called drug abuse "one of the greatest problems facing us internally in the United States." Since 1984, First Lady Nancy Reagan has led a crusade to get young people to "Just Say No" to drugs. Both the President and Mrs. Reagan are at this time leading a national movement for drug-free schools and workplaces.

Data on drug abuse, with its pervasive downward reach to younger age groups and its connection with crime is frightening; data on alcohol abuse is sobering. Last April the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) released figures based on 1983 studies which show that alcohol abuse is estimated to cost our society at least $116.7 billion a year and drug abuse adds another $59.7 billion.

Drugs

Other ADAMHA figures about drug abuse of interest to NASBE and the education community:

- An estimated 60,000 12 and 13-year-olds have tried cocaine;
- An estimated 40 percent of 1985 high school seniors will use cocaine by the time they are 25-26;
- While 80 percent of 1985 seniors acknowledge the harmful effects of using cocaine regularly, only one-third see much risk in experimenting with it;
- 49 percent of seniors said it would be easy for them to get cocaine;
- In the 26 major cities that report on the Drug Abuse Warning Network, emergency room hospital cases involving cocaine tripled between 1981 and 1985 — from 3,253 cases to 9,733 — and in 25 cities total deaths almost tripled during the same period (from 190 to 547);
- Cocaine is one of the most powerfully addictive drugs known — given free access, laboratory rats prefer cocaine to water and food, and will continue to self-administer cocaine until it kills them;
- More than half of all patients seen in an inner-city Chicago drug abuse treatment program in 1983 had a primary diagnosis of cocaine dependence — compared with 3 percent in 1980;
- Nearly two-thirds of all high school seniors used an illicit drug at least once before they finish high school, 40 percent have used drugs in addition to marijuana;
- Of every 20 seniors, one of them smokes marijuana on a daily basis.

Counseling on a personal basis or in the classroom can help today's students identify and respond to sources of stress.

Alcohol

"Beer makes him cease being a man. It causes your soul to wander, and you are like a crooked steering-oar in a boat that obeys on neither side..."

From the Anastasi Papyrus, Egypt, about 1500 B.C.

The above admonition is believed to have been from an Egyptian teacher to his pupil. Even the ancients saw a relationship between excessive drinking and out-of-control vehicles.

In the United States, 16-24 year-olds comprise only 20 percent of licensed drivers, and account for less than 20 percent of total vehicle miles traveled. But they are involved in 42 percent of all fatal alcohol-related crashes. Almost 8,000 persons between 15 and 24 were killed and 220,000 injured in alcohol-related traffic accidents in 1984.

Licensed 16-24-year olds comprise only 20 percent of all drivers, and account for less than 20 percent of total vehicle miles traveled, but they are involved in 42 percent of all fatal alcohol-related crashes.

Some other compelling statistics about alcohol abuse:

- About 1 in 20 high school seniors drink alcohol daily;
- 48 percent of boys and 30 percent of girls in the 1984 National High School Senior Survey conducted for the National Institute on Drug Abuse reported heavy party drinking (5 or more drinks in a row) two weeks prior to the survey;
- Approximately 56 percent of all seniors began using alcohol prior to high school, another 36 percent started during high school.

Some other data from the survey, which was conducted for NIDA by the University of Michigan Institute for Social Research, show:

- Frequent use of alcohol tends to be disproportionately concentrated among males, and males are more likely to drink large quantities of alcohol in a single sitting — however the sex difference is narrowing;
- Alcohol use tends to be somewhat lower in the South and West than it is in the Northeast and North Central, particularly in the rate of occasional heavy drinking.

TEEN SUICIDE

Half a million American teens and young adults thought seriously about ending their lives last year. Early in 1984, in a six-week period, six Westchester, N.Y., teens took their lives. They left no clues why. A year later and worlds away, eight young male Indians on the two-million acre Wind River Reservation in Wyoming hanged themselves within a two-month period. About the same time, two 15-year-old friends from Fairfax County, a wealthy suburb of Washington, D.C., committed suicide — the second only days after the first.

On the Indian reservation, at a student suicide prevention session, teens complained there was nothing for them to look forward to that weekend. All the recreation money for the two tribes went for bingo; the reservation had neither a mall nor a movie theater, and teenagers had no cars to drive into town. Alcohol was a factor in at least four of the eight suicides.

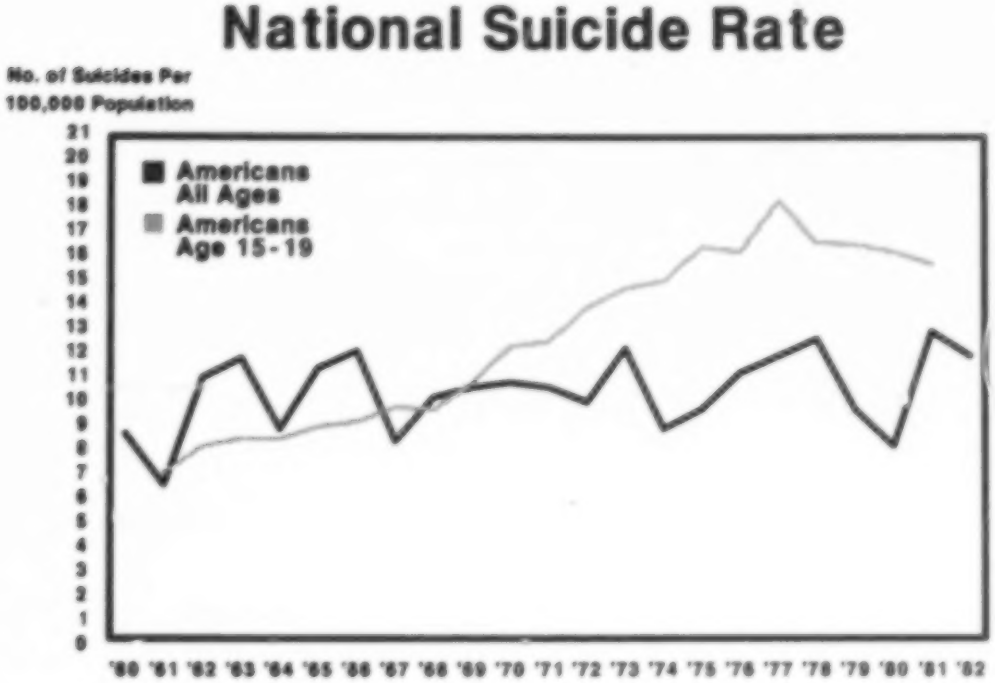
The crisis is most severe among young men, speculates Rev. Tony Short, a Jesuit priest serving the reservation. Young women seem to develop themselves and find jobs, the young men do not. "The men grow up physically, but not emotionally," he commented.

On the other hand, the Westchester County teenagers had organized sports, after-school activities, access to movies, VCRs, and cars. One of the six suicides, a 14-year-old boy who had an intelligence quotient of 138, had discussed socialization problems with a school psychologist.

"Kids are surrounded by affluence, but many feel deprived in some fashion," a medical director of a Westchester Hospital commented. "There's a lack of involvement by parents who often have their own jobs and interests. So the children often ask: 'Who really gives a damn?'"

Other Factors

Another factor relating to teen suicide is a widespread pessimism among kids. The chairman of the Westchester Suicide Task Force, George Cohen, said, "We've got too many 14-year-olds who are already cynical and depressed about the future.



The rate of suicide has more than doubled for youths between 15 and 19.

Without hope, they don't seem to want to make the effort to deal with even the common problems of today."

Another theory for the increase in suicides among affluent youth is their tendency to give up too easily. Some teenagers have had few difficult life experiences and have not learned how to withstand disappointment. They have not had the varied experiences with life which develop the understanding that things change.

"Many of these affluent kids have poor coping mechanisms," said Dr. Michael Peck, a Los Angeles psychologist and suicide prevention consultant. "They haven't had to cope with the frustrations many inner-city kids face. When they become overwhelmed by pain, they can't imagine things will be better in the future. They're too young to realize, 'This, too, will pass.'"

One of the difficulties in dealing with teenage suicide is that many incidents are not reported as suicides. Many coroners won't list a self-inflicted death as suicide unless a note is found. To standardize reporting, the Center for Disease Control in Atlanta, Ga., has led a task force of eight health and forensic organizations in establishing criteria. The group is close to agreement and hopes to disseminate its criteria to coroners and medical examiners early next year.

Figures available from the National Center for Health Statistics show that since 1960, the rate of suicide has more than doubled for youths between 15 and 19, from 3.6 per thousand to 8.7. But most startling is the nearly tripling of the rates of white males from 5.9 to 15.1 per thousand.

Authorities say suicide is the second biggest killer of adolescents, following accidents. Although eight times as many girls as boys attempt suicide, males appear to be four times as successful. They use more lethal means, such as hanging and shooting, while girls are more likely to use pills which make rescue more likely.

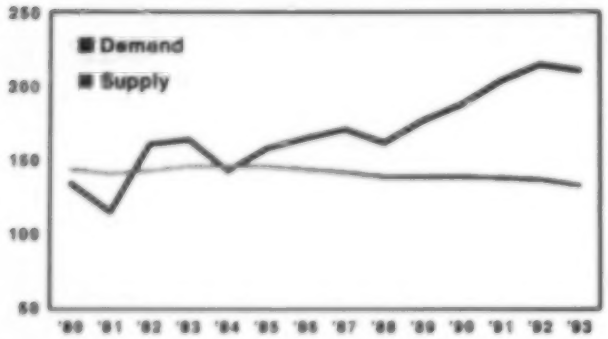
According to Paul Holinger, associate professor of psychiatry at St. Luke's Medical Center in Chicago, as the adolescent population increases, so does the rate of suicide. If this trend holds, educators can expect a slight decrease in teen suicides for the rest of this decade as the teenage population declines, but an increase in the 1990's. This, however, does not justify ignoring the problem.

Dropouts, alcohol and drug abuse, and teen suicide are extremely difficult issues with which educators must grapple. We'll examine some possible responses in the next section.

D. WHERE ARE THE TEACHERS?

It appears without doubt our nation will be confronted by teacher shortages in coming decades. For a host of reasons —greener pastures in other fields, concerns for safety in urban areas, teacher accounts of being undervalued and overworked, perceived low social status, low salaries — young people have been reluctant to enter teaching.

Teacher Demand and Supply



Demand for teachers declined slightly during the mid 1980's, but is expected to climb steadily for the next ten years or more.

Teacher Demand

The demand for additional teachers, according to the U.S. Department of Education Center for Statistics, declined slightly during the mid-1980s, but is expected to climb steadily for the next ten years or more. The Center's projections are based on assumptions that total enrollment will rise, teacher-pupil ratios will improve slightly, and teacher turnover will remain constant at six percent.

Overall, teacher shortages are felt most severely in central city schools and in big school districts with enrollments greater than 10,000 students. For instance, the Los Angeles (Calif.) United School District, according to the Center's 1983 survey, accounted for more than half the shortages reported in the West and one-fourth of all shortages nationwide.

Teacher Supply

The Center observes that projecting the supply of additional teachers is even less certain than estimating demand. Supply consists of new teacher graduates, former teachers, and others prepared to teach but who haven't.

In 1983 the supply of newly qualified teacher graduates was estimated to be 146,000. However, as a percent of BS degree recipients, new teacher graduates fell to 14 percent from 34 in 1970.

If the 14 percent figure remains stable over the next 10 year period, the supply of newly qualified teacher graduates will remain constant at 140,000 per year. This is 80 percent of the anticipated 1989 demand. Such a senario will require that large numbers of teachers be hired from the reserve pool or from other fields of college preparation. All sources undoubtedly will have to be tapped by the year 2000, when schools of education will be quite different from today because of the impact of technology, emerging concepts of education equity, quality, and individualized instruction.

Another disturbing finding of the Center's 1983 survey is the continuing mood of career dissatisfaction on the part of current teachers. It was found that 43 percent of teachers probably or certainly would not become teachers if they had it to do all over again. Such a large reservoir of negative feeling undoubtedly acts as an inhibitor to encouraging young men and women to enter the profession.

PART III

RESPONDING TO THE NEW REALITIES

A. RESPONSES TO OUR STUDENTS' WORLD

KEEPING "AT RISK" STUDENTS IN SCHOOL

What works in keeping at-risk students in school? An analysis of successful alternative programs by Gary Wehlage of the University of Wisconsin/Madison showed the following characteristics:

- Small size — the programs served 35-60 students and employ 2-6 faculty;
- Program autonomy — each program has its own name, space, and facilities; teachers have authority to deal with problems in their own way;
- Committed teaching force — teachers have high expectations for their students, are accountable for their success, and take on the extended role of counselor, parent and advocate. They deal with the whole student;
- Non-traditional curricula — teachers use an individualized approach, start students at their own level, and use "real-life" examples and problems wherever possible;
- Experiential education or internships — students are oriented to the broader world outside of the school by participating in programs linking them to the external community, such as working in governmental offices, nursing homes, tutoring younger students, or working in various private sector offices;
- Positive atmosphere and supportive peer culture — there is a family atmosphere among students; they work out problems together; they learn that rules are in their own self-interest.

Model Programs

The Institute for Educational Leadership cites a number of successful model programs aimed at keeping at risk students in school. Some of them include:

- *A Summer Training and Education Program in Philadelphia*: A three-year demonstration project giving 14-year-olds — 1,500 of them — a chance to catch-up in their reading skills during the summer months while earning money in a summer job and learning about family planning;
- *A Youth Tutoring Project in San Antonio*: Hispanic students are given compensated employment for 8 hours a week helping third graders with their school work;
- *The Post-Secondary Planning Program in Dade County (Miami) Florida*: A career counseling program, using computer labs and mock employment situations, that familiarizes students with careers. The dropout rate fell from over 20 percent to 15 percent the second year after the program was installed. In addition, job placement rates increased significantly;

• *Adopt-A-Student Program in Atlanta*: A group of 40 local businesses provide students in the lowest quartile of their high school class with a role model on a one-to-one basis. Students improve their job awareness, job preparation, job aspirations, as well as life-coping skills;

• *Los Angeles Unified School District Dropout Recovery Prevention Program*: Now being piloted in 21 elementary, junior and senior high schools, provides additional staff members to identify potential dropouts and provide them with counseling, tutoring and psychological help. The staff also seeks out students who already have dropped out;

• *Cities in School Projects*: Initiated in Atlanta and Indianapolis in 1974 and now replicated in Houston, New York City, Bethlehem (Pa.), Los Angeles, West Palm Beach and the District of Columbia. The projects involved a coalition of the mayor's office, school system, business community and public and private social service agencies, all of whom focus on dealing more effectively with the at-risk student.

DRUG ABUSE — GETTING TOUGH

The house of education is destined to play a leading role in the crackdown on drug and alcohol abuse.

A month ago, the U.S. Department of Education issued a 78-page publication entitled *What Works: School Without Drugs*. It noted that "The drug plague has entered the schools across America, and it is seeping into lower and lower grades, even into elementary schools...The good news is that use of illegal drugs can be stopped."

The monograph stated drug use impairs memory, alertness, achievement, the capacity of students to think and act responsibly, and disrupts the entire school. The publication has four major action-plan sections:

What Parents Can Do

Major recommendations in this section include: teaching standards of right and wrong and demonstrating these standards through personal example; helping children resist peer-pressure to use drugs; knowing who their children's friends are; talking to their children about their interests and problems; being knowledgeable about drugs and signs of drug use. A fact sheet on signs of drug use accompanies the latter recommendation.

What Schools Can Do

This section contains fact sheets on such legal questions as "search and seizure" and "suspension and expulsion," and recommends that schools: determine the extent of drug use and establish a means of monitoring that use; have clear and specific rules regarding drug use, including strong corrective actions; consistent enforcement of established policies; have a strong K-12 drug prevention curriculum; and reach out to the community for support — parents, law enforcement officers, treatment organizations and private groups can work together and provide necessary resources.

What Students Can Do

Under this heading the report recommends students learn the effects of drug use and why drugs are harmful; encourage other students to resist drugs; persuade those using drugs to seek help; and report to parents and the school principal those who are selling drugs.

What Communities Can Do

Communities can provide schools with expertise and financial resources from community groups and agencies; create mutually supportive relationships between the schools, police, and courts.

Some Effective Policies

Some examples of effective drug education and prevention policies.

Northside High School, Atlanta: A new principal, Bill Rudolph, came in tough, stated illegal drug activities would lead not to detention but to court. Police and parents were immediately notified of such activity. Parental groups discussed the problem, set curfews, chaperoned parties, and monitored their children's whereabouts. Northside, which has 1,400 students from 52 neighborhoods was known as "Fantasy Island" in 1977. In 1984-85, it reported only three drug-related incidents, its SAT scores rose to well above the national average, placing it among the top schools in its district.

Anne Arundel County School District, Annapolis, Maryland: The county instituted a strict policy at the beginning of the decade for students using or possessing drugs:

• Police and parents are notified and student suspended 1-5 days.

• To return to school, a student must state where and how drugs were obtained, and agree to participate in the district's Alternative Drug Program at night, or enroll in its Learning Center (grades 7-8) or evening high school (grades 9-12). Accompanied by parents, students must also take at least five hours of counseling. Parents also are required to sign a Drug/Alcohol Reinstatement Form.

• Students failing to complete the Alternative Drug Program are transferred to the Learning Center or to evening high school.

G. EDUCATION AND DOLLARS

Louder and more insistent come the calls for educational reform. But sources of funds for these improvements have not been easy to find. Educators estimate the 7 percent increases budgeted last year provide only a third of the new monies needed for excellence in the schools.

Changing Federal Role

The federal government has been gradually bowing out of the education business, with contributions to school costs dropping from 9.2 percent in 1979 to 6.4 percent nationwide in 1985-86. While the dollar amount of federal funding has remained fairly constant in the last few years, inflation has eroded the spending power of the funds.

"I, for one, am confident that the American people are ready, willing and able to improve their schools, and to assist their children to learn," said Education Secretary William Bennett in introducing his report, *What Worked,* early this year. "The principal contribution that the federal government can make is to supply good information to the American people as they embark on this endeavor. Armed with good information, the American people can be trusted to fix their own schools."

These words may be encouraging to states experiencing an economic development boom, but to many Midwest and Gulf Coast states suffering from the collapse of family farms and plummeting oil prices, they offer little.

For some school districts, however, less federal funding is a bonus since it also should mean less federal control of the schools.

Beyond educational reforms and questions and funding merit pay and other excellence-rewarding programs, school systems must grapple with existing problems of salaries, retirement costs, school plant modernization, high tech teaching aids, and books and pencils. For most school districts about half the educational funding comes from the state. States suffering economic declines will be squeezed to fund existing, let alone additional, programs.

The local impact of oil and farm problems can also be severe, since many communities experienced declining incomes from falling real estate values as families moved out of the area to look for work, often selling at bargain prices or abandoning their homes altogether. For families that stay, those in private school may be forced for financial reasons to transfer to public school, adding to the public school burden. Competition for scarce social re-

• Students are expelled if caught using or possessing drugs a second time.

R.H. Watkins High School, Jones County, Mississippi: This school has developed a peer-counselor program. To become a drug education peer-counselor, a student has to pledge to meet certain duties and responsibilities. Some of them include:

• Remain drug free, maintain a citizenship average of "B" or better, participate in a club or extra-curricular activity that emphasized the positive side of school life.

• Complete a training program, and present monthly programs on drug abuse in each of the elementary and junior high schools of the LEA, and to community groups, churches, and state-wide groups as needed.

Samuel Gompers Vocational-Technical High School, New York City: In 1977, the *New York Times* likened Gompers, 95 percent of whose 1,500 students are from low-income families, to a "war zone." That year a new principal, Victor Herbert, working with authorities and the private sector, determined to install pride in the school. As a result:

• It was arranged for the same two policemen to respond to all calls from the school; students eventually came to know and confide in the officers.

• Security guards and faculty were placed outside each bathroom; "hall sweeps" were conducted in the middle of class periods; students were not allowed to leave the premises at lunchtime.

• A drug education program was established for students, teachers, and parents.

• Private companies, such as IBM, were persuaded to hire students after school and in the summer. Hirees had to be drug-free, thus sending out a message that employers would not tolerate drug use.

• A computerized attendance system was installed to notify parents of a child's absence, and newly hired "family assistants" worked to locate absentees and bring them back to school.

In 1985, there were no known incidents of student use of alcohol or drugs in or on school grounds and only one incident of violence was reported.

The Los Angeles School District, California: The district teamed up with the local police department to create DARE (Drug Abuse Resistance Education) which now operates in 405 schools, grades K-8. More than 50 specially selected police officers teach students to say "no" to drugs, build up their self-esteem, manage stress, and resist pro-drug messages. Officers spend time with the students on the playground at recess. Meetings are held with teachers, principals, and parents to discuss the curriculum.

With the assistance of parents and school administrators, peer group counseling has proven effective in many school districts throughout the nation.

New York City School District, New York: Somewhat on the same order, New York City has Operation SPECDA (Special Program to Educate and Control Drug Abuse) which operates in 154 schools, serving students in grades K-12 and their parents. Police help provide classes and presentations in the schools on drug abuse and concentrate their enforcements within a two-block radius of schools to create a drug-free corridor for students.

THE ALCOHOL PROBLEM — SIGNS OF PROGRESS

Many different programs have been developed in efforts by the school community to combat alcohol usage and abuse..They incorporate many of the features mentioned in the drug abuse programs. Some other prevention approaches include:

- Alcohol abuse education. The use of alcohol among high school students declined between 1979 and 1984 according to the 1984 National High School Senior Survey. Students using alcohol at least once a month dropped from 72 percent to 67 percent, and those drinking once a day dropped from 6.9 to 4.8 percent, a very significant decrease. During this same 1979 to 1984 period, the percentage of high school seniors who perceived great risk in occasional heavy drinking increased from 35 to 42 percent. The survey noted that this gradual change in beliefs preceded a change in usage patterns by several years — emphasizing the importance of these beliefs in determining behavior.

- Scare-tactics programming, such as that presented by Safety & Survival, Inc., of Montgomery County (Maryland) which, with the help of a $500,000 grant from the Ford Foundation trains police officers to use graphic slides of local accidents that killed or maimed students. Students are taken through the crisis — from crash, to autopsy, to funeral. Ford officials state that the fact that 11 teenagers die every day in alcohol-related accidents justifies the program and its rugged content. The company's grant will enable Safety & Survival to train about 1,400 police officers and other officials to present the Scared Stiff program to 1.5 million high school students by 1989.

- Training teams of school, community, and volunteer representatives in alcohol abuse problem-solving techniques. An example is the U.S. Department of Education's Alcohol and Drug Abuse Education Program (ADAEP) which in 14 years has trained some 5,000 teams throughout the country. The teams in turn have had an impact on hundreds of thousands of individuals —students, parents, teachers, administrators, and community leaders. ADAEP has regional training centers in Sayville, New York; Coral Gables, Florida; Chicago, Illinois; San Antonio, Texas; and Oakland, California. The centers provide training, and follow-up on-site support to teams of five to seven representatives of local schools and communities. The program is predicated on the premise that problems and their solutions differ with each community, that local schools are responsible for solving local problems, and that the resources for solving the problems are at the local level. Many of the ADAEP-trained teams develop their own training capability and train additional school teams in their districts.

TEEN SUICIDE — NO EASY SOLUTIONS

The job of eliminating the causes of suicide is compounded by a lack of knowledge on how to detect potential suicides and how, once detected, to prevent a self-inflicted death.

After the first of two Fairfax County youths took his life, school officials brought in counselors to help the students deal with the issue. Despite this immediate help, the second suicide occurred just days later.

Expecting schools to solve the suicide problem is doomed to failure, according to Fairfax County schools superintendant Robert R. Spillane. He questioned how effective school suicide-prevention programs can be, especially if they consist of lectures to "feel good about yourself and then the bell rings and you go on to the next class."

A Washington, D.C. psychologist, Dr. Alan Berman, said that communities and schools in their rush to do something about suicides may, in some instances, be causing more harm than good. "We really need research and evaluation of the 500 or so suicide-prevention programs in our schools," he said. "Many are fine on paper, but we don't really know how effective they are." Berman is working with researchers, health professionals and educators to develop guidelines and recommendations for schools.

In the meantime, bringing the issue into the open seems to help, said Dr. Eugene Aronowitz, Westchester County's Mental Health Commissioner. "It seems that when the community begins to openly recognize the problem, the suicides stop." Following the rash of suicides in 1984, the county took an aggressive stance and widely publicized the availability of mental health facilities. Suicide awareness classes became part of the regular curriculum for junior and senior high schools in the county. Teenagers were encouraged to talk about their problems with parents or other sympathetic adults in school or other settings.

Also vital, said Westchester task force's George Cohen, is early preventative education. "We need to teach kids that depression is common, that it's okay to feel mad or sad or upset. They have to know that if they can just be patient, they will feel better soon."

B. EARLY CHILDHOOD EDUCATION — A GROWING NEED

Fifteen years ago, less than one-third of all mothers with children under the age of one held a job outside the home. Five years ago, the figure was approximately 40 percent. Today about one-half of all mothers with children under the age of one are working, with more than 70 percent holding full-time jobs.

These and other sweeping social changes, such as the growth of single parent homes, are giving a dynamic push to the emergence of early-childhood education programs.

Census Bureau figures show that between 1970 and 1983, the number of three and four-year-olds in formal pre-school programs increased from 1.5 million or 21 percent, to 2.6 million or 38 percent. Enrollment of five-year-olds increased during the same period from 69 percent of the overall total to 85 percent. And in 1984, an estimated one-million three-year-olds and 1.7 million four-year-olds were enrolled in nursery schools. More than 60 percent of them were in private facilities.

Every state now provides funds for kindergartens, and some, such as Delaware, Florida and Kentucky, make it mandatory for five-year-olds to be in a public or licensed school.

Many states are pushing for the start of formal schooling prior to the age of five, which raises controversial issues as to how pre-kindergarten programs should be organized.

Louise Ames, associate director of the Gesell Institute of Human Development in New Haven, Conn., states, "The ordinary four-year-old is not mature enough to perform tasks required in kindergarten."

Benjamin Bloom of the University of Chicago maintains that waiting until four is too late. And Burton White, director of the Center for Parent Education in Newton, Mass., holds that fundamental learning patterns are established by the age of three. Consequently, holds White, public policy should concentrate on training the parents of infants and toddlers to understand each stage of their child's development and treat the child accordingly.

Pre-K Education

Pre-primary education, or public school programs for four-year-olds, has drawn a lot of attention. Power positives like the Perry study and various Head Start reports make a good case for beginning youngsters early. The studies show that disadvantaged youngsters benefit not only in elementary grades from the confidence-building and language readiness of pre-primary programs, but these children achieve future success in school and in establishing their careers. Savings to the community in terms of remediation costs, crime, and welfare benefits far outweigh the money spent on a good pre-kindergarten program. The same dramatic results do not appear to be true for middle-class children, however.

Child education expert David Elkind cautions that the rush to institute early childhood programs should be tempered with attention to the quality of the program — a low pupil-teacher ratio is essential — and the type of instruction. He warns that formalized, task-oriented curricula can lead to stress (and some pediatricians reportedly are already seeing symptoms of stress in four-year-olds) and can harm a child's motivitation to learn in the future. Elkind questions whether pre-primary classes and all-day kindergartens are not more consistent with child care needs of working parents than with sound educational policies.

Many advocates of pre-kindergarten programs believe they should be family centered. This could take place in day-care centers whose employees have knowledge of child development, but who are not licensed to teach academic subjects. Others call for subjecting pre-kindergartners to strong doses of intellectual development. Fundamental to this aspect of the debate of early childhood education is who will run it.

Early Childhood Programs

As the debate continues, public school systems across the nation are establishing pre-kindergarten programs. More than half the states have early-childhood policies and others are considering them.

Minnesota is the first state to provide funds for early-childhood family education. Approximately one-half of the state's local education systems are participating in the program, known as Early Learning Design, which seeks to teach parents how to understand a child's developmental stages so as to help them grow intellectually.

Two years ago, Missouri's legislature required all school districts to provide developmental, language, hearing, and other forms of screening of one and two-year-olds and to offer parent education for families of children from birth to three-years of age.

A model that is gaining increasing credibility is New Orleans' Adept Child Care Enrichment Program. Many New Orleans elementary schools open at 7:00 a.m. and close at 6:00 p.m. Depending on their means, New Orleans parents pay as little as $20 a month for non-academic before and after-school services for their youngsters at participating schools.

Some school systems have dropped plans to run their own day-care centers because they have run into so much opposition from private day-care providers. Others seek to make cooperative arrangements with the private sector, such as making public school building facilities available but with operational control in the hands of the private sector.

Not to be overlooked is the the surge in on-the-job day care provided by private industry. Approximately 2,000 companies, three times the number in 1982, now provide some form of child-care assistance. Industrial giants such as Wang, AT&T, IBM and others, as well as many smaller local businesses find that child-care headaches short-circuit recruiting efforts and otherwise affect productivity. Wang's example: The company maintains a one-story, semi-circular building one mile from its corporate headquarters in Lowell, Mass., that has 24 classrooms, a cafeteria and gymnasium with 80 full-time staff members. The building is open from 6:30 a.m. to 6:00 p.m. and cares for 280 youngsters ranging in age from six months to five years. Parents pay $70 a week for preschoolers, $100 for infants and toddlers and Wang subsidizes the difference.

C. TEACHER SUPPLY — SOME POSITIVE SIGNS

What are some of the positive signs — or interpretations —in the teacher picture? Earlier this year Secretary of Education William Bennett stated, "Today, believe it or not, more American students are interested in careers in teaching than in careers in computers." Citing a survey conducted by UCLA and the American Council of Education, he observed that last year 6.2 percent of college freshmen declared teaching their chosen profession, the third consecutive annual increase (up from 4.7 percent in 1982). He also noted that between 1982 and 1985, teacher salaries rose 22.3 percent and that "the median household income of teachers is now equivalent to that of college graduates in general: both are about $30,000."

A Challenge to Gloomy Forecasts

Emily Feistritzer, a former teacher who directs the National Center of Education Information (NCEI), challenges the conclusions of those who have warned about low teacher morale, poor quality of teacher applicants, shortages of minority teachers, and lack of decent teacher salaries.

The report points out that the 143,000 new teacher graduates in 1982 were substantially less than the 284,000 in 1970. However, she observes, in the early 80s, "there not only was no across-the-board demand for teachers, you could scarcely find a teaching job if you wanted one. Five years ago we were talking about how to get rid of teachers so we could make room for younger ones."

Teacher turnover rates have remained nearly 6 percent a year for the past 15 years, she notes. As for women leaving or not entering teaching because of the lure of higher paying, more "prestigious" jobs, she observes, "there are far more women college graduates in the United States to go around these days: 6 million women are enrolled in college today, twice as many as in 1970. Women make up about 75 percent of teachers in the 25-34 age group, compared with 63 percent who are between 35 and 44."

In 1985, Scott Thompson, Executive Director, National Association of Secondary School Principals, speaking to a joint school board and superintendent conference in Maryland, suggested that the teacher shortage would slowly correct itself as more young people learned of the job opportunities in the field. "A natural marketplace adjustment will take place," he advised the group.

In an NCEI survey conducted earlier this year, 1,592 teachers were asked if they would give up their jobs for another job with a salary increase of $5,000 (approximately 20 percent for most public school teachers and 35 percent for private school teachers). Of the responders:

- 62 percent of private school teachers said "I would keep my job."
- 47 percent of public school teachers said the same thing.

A recent poll appearing in PARADE magazine asked teachers, "What would help you do your job better?" Their most frequent response was, "students with a better attitude toward learning;" second was, "more parental involvement with their children's education at home." Incidentally, higher pay placed seventh in the teacher poll.

Getting and Keeping Teachers

A fundamental question is: How can first-rate teachers be obtained and retained in the years ahead?

- Tennessee has pioneered a system of teacher career ladders.
- New Jersey has introduced an alternate route to teaching; applicants are chosen on the basis of their teaching abilities with master teachers serving as mentors.
- Florida helps retiring military personnel train as math and science teachers and begin a second career in the schools.
- During the summer of 1986, a Maryland county (Prince George's) received 2,500 applications

for 400 teaching positions, primarily because of a well-publicized linkage between the new jobs and one-time only fringe benefits. Banks offered loan discounts to the newly hired; businesses provided reduced rates and free services; candidates received reduced room rates at local inns; a major industry in the county loaned its college recruiter to the school system to demonstrate how the company attracts top engineering students; and local businesses made special efforts to hire teachers during the summer.

• A Harris poll in 1984 found that 84 percent of teachers believe it should be easier to remove bad teachers from the classroom, indicating the inherent pride teachers have in their profession and their desire for quality within their ranks.

Some other things states are doing to encourage men and women to enter the teaching profession, and to remain in it, include:

• Extending salary schedules beyond 12 years of work experience and awarding bonuses for longevity, salary differentials for master teachers, special support systems for interns and beginning teachers, merit pay, funding the retraining of teachers for service in categories of high need, enacting legislation related to the reduction of violence in the schools;

• Florida has loan forgiveness, scholarships in special areas, tuition reimbursements, a visiting scholar program, incentives to teach in low income areas, summer institutes, and an experimental certification program for liberal arts graduates;

• Illinois has summer institutes for math, science, and computers, and scholarships for teacher training in high school science and math;

• Iowa has forgivable loans in math and science and for experienced teacher training;

• South Carolina provides for alternative certification for liberal arts graduates;

• Wyoming provides scholarships for the training of existing teachers;

A number of states have provided additional recognition to reward teachers. Some examples:

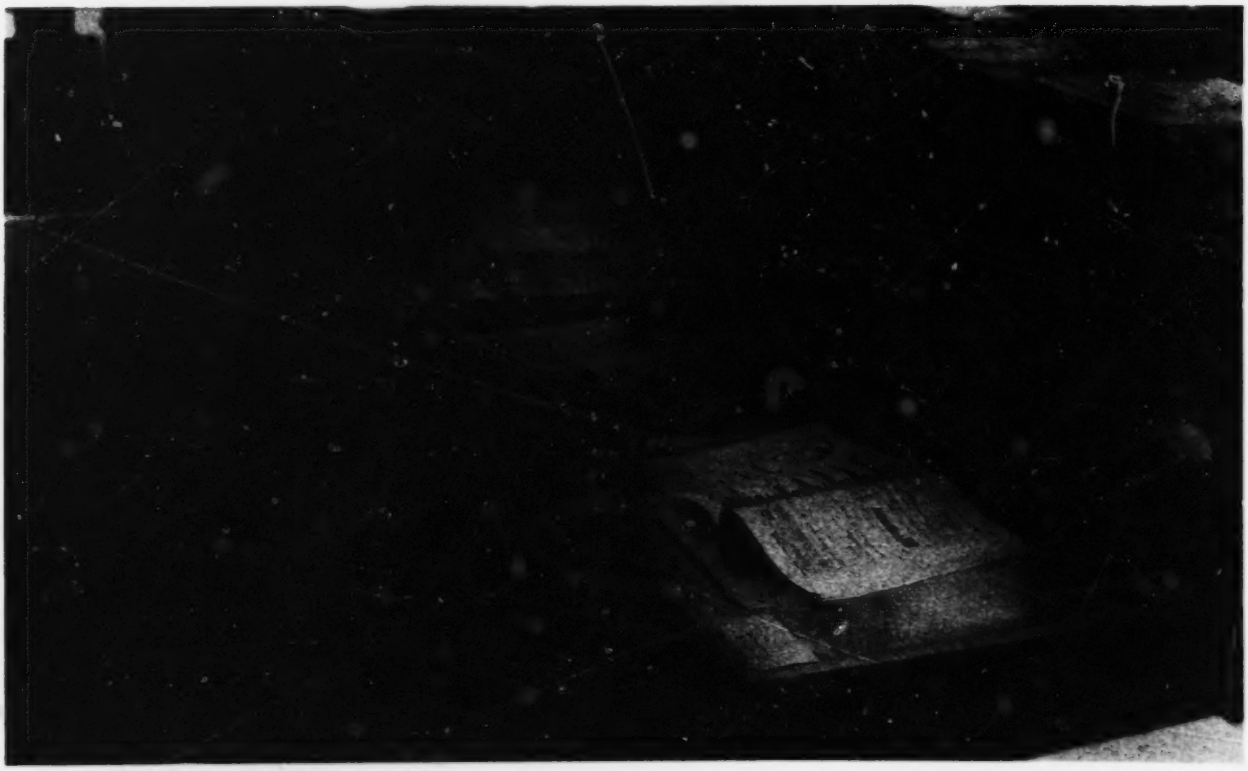
• Arizona — mini-grants to outstanding teachers;

• North Carolina — Center for the Advancement of Teaching provides outstanding teachers the opportunity to study advanced science and humanities;

• Pennsylvania — has Excellence in Teaching Awards;

• Wisconsin — cash awards to teacher-of-the-year and principal-of-the-year;

• Puerto Rico — teacher Recognition Week, and cash awards for their teacher-of-the-year.



D. THE PROMISE OF COMPUTERS AND TECHNOLOGY

A few years ago, *Time* magazine named the computer as its "Man of the Year." Since then, we have begun to experience an exponential use of computers in our schools — and their use still seems in its infancy.

Computers in the Schools

In undoubtedly the most extensive survey on school computer use to date, the Johns Hopkins University Center for the Organization of Schools reported that between 1983 and 1985 the following changes occurred in computer usage in our elementary and secondary schools:

- Computers in use quadrupled from 250,000 to over 1,000,000;
- Three-quarters of the schools which had not previously used computers began to do so;
- The proportion of elementary schools with five or more computers increased from 7 percent to 54 percent;
- The proportion of secondary schools with 15 or more computers increased from 10 to 56 percent;
- During the 1984-85 school year, approximately 15 million students and 500,000 teachers used computers as part of their instructional programs;
- One-fourth of all teachers used computers "regularly" with students during the 1984-85 school year (37 percent of the teachers in the K-6 schools and 15 percent in the secondary schools).

Based against four criteria, the survey found that 27 percent of high school teachers were "experts" in the usage of computers, compared with 21 percent of teachers in the middle schools, and 10 percent K-6 teachers.

What are the major instructional uses of school computers?

In elementary schools, more than half were used for "drill and practice and tutorial" programs (that is, CAI or computer-assisted instruction); 12 percent of student time was spent in writing computer programs.

In high schools, 16 percent of time was spent on CAI; half of the students spent their time programming.

In elementary schools, computers are used primarily for mathematics and language arts (English and reading). In middle schools, these two are joined by computer literacy in usage. In high schools, computer literacy and programming are the major subjects: business education and mathematics follow far behind.

Actual computer time experienced by the students was small. The survey found that:

- In elementary schools, students had 20 minutes of computer time per week in 1983, and 35 minutes in 1985;
- In high school, time doubled, from 45 minutes per week in 1983 to 90 minutes in 1985. The median high school user had an hour-and-three-quarters per week.

The report noted that the most active 10 percent of computer using students at each school level take more than one-third of all students computer time, while the most active 25 percent get roughly three-fifths of all student computer time.

Computer technology has necessitated new skills for both teachers and students.

Technology and the Curriculum

The Johns Hopkins report was issued in June, two months after the National Task Force on Educational Technology reported to the U.S. Secretary of Education. Looking ahead to the year 2000, the Task Force said: "The most significant impact of technology on education will come from the extensive transformation of the curriculum and instructional practice. The movement should be toward learning geared to each individual." To bring about the necessary curriculum and instructional changes, it called on state education agencies to:

- Urge all teachers to become effective users of computer related technology for educational purposes;

- Establish standards for graduation which assure that all students acquire new and traditional basic skills as well as higher-order reasoning skills in a number of fields so that graduates can function effectively in our changing society;

- Cooperate with higher education institutions to work with publishers to ensure that textbooks form an integral part of the instructional package that includes technology;

- Cooperate with the schools, higher education institutions, and information technology industry to tranform education through the applications of technology.

The Task Force, which was created in 1984, recommends that each state establish a demonstration school, or schools, to show the potential of technology to help transform education. "Technology-based management will yield more productive use of teacher time and will eliminate the need for special programs; in effect, each student will be in a special program. In addition, enormous savings will accrue to society from the reduction of the out-of-school costs of dealing with the casualties of our current system..."

Teacher Role Altered

The computer, video discs and other interactive literacy technologies, will alter the role of the teacher in the next 15 years. The teacher will become more of a coach and motivator instead of a dispenser of information and judge. By carrying a significant portion of the instructional burden, the technology can help the performance of a teacher who is weak in a specialty area, such as math, science or languages.

An emerging technology — video discs linked to computers — lets teachers program an education program for each child — a lesson plan, curriculum guides. They also can connect directly with the Educational Resources Information Center (ERIC) and obtain expanded materials. Some experts perdict there will be no need for teacher education institutions as we know them because we will not need teachers as we now know them.

It is accepted as a given by those within the computer-technology industry that more sophisticated artificial intelligence techniques will become available, making dialogue between the student and the computer more lifelike and helpful. Computers have no biases. They have infinite patience, and they provide support without any judgment; thus they offer face-saving salvation to those students who need more trials than normal to master their materials.

The report by the National Task Force on Educational Technology concludes: "The profound respect for the individual that separates our way of life from that of most other societies and the human resources that we need to make that way of life flourish compel us to make every necessary sacrifice to provide the best learning environment possible for each of our citizens. Clearly, now is the time to begin that needed transformation."

E. SCHOOL IS A PLACE, NOT A DOZEN YEARS OF EDUCATION

Public schools are no longer the concern solely of parents of school children and of professional educators. Schools belong to all of the community and should serve the community. Schools are changing their focus to "learning centers" or "community education sites" to reflect their expanded roles as the cradle-to-grave educational continuum.

The traditional and very reliable constituency on which education could always rely for the public support it needed is no longer there. Households with children have declined from more than 60 percent of the total to just 36 percent. School districts are finding it increasingly difficult to pass bond issues, budgets and tax levies.

The National School Public Relations Association recently studied 50 successful bond issue or tax levy votes in both large and small school districts to determine the factors that lead to success at the polls. In all fifty cases, the districts had an on-going public relations program in place long before they entered upon the bond or levy campaign. Just as a district in a crisis situation would never go to a court of law without a good lawyer, so school districts can no longer go to the court of public opinion without a good public relations program.

Partnerships with Business and Industry

Possibly the most important member of education's expanded constituency — the one holding the most potential for help — is the business community. The most important and possibly most obvious way for schools to interest local companies in partnerships is to promote the benefits to local employers of well-educated, well-trained students entering the work force after graduation. Another way is for schools to meet the needs of business through adult-education programs, use of school facilities for recreational events and offering industry-based job training.

For at least two decades, schools and local businesses have joined forces in the interest of better education. Sometimes these relationships have involved only visiting professionals and workers talking about their jobs on a high school career day. Other realationships are long-term, one-to-one situations that set out to meet a variety of school needs in an Adopt-a-School program. Some firms work directly with one school or district, others offer one service to any school in the county that asks for it. Sometimes local businesses form educational foundations to combine resources.

The results can be significant. The Fairfax County, VA, school system has more than a dozen different programs that were initiated since 1980 linking the schools to local and national firms operating in the county. With industry assistance — both technical and financial — high school students operate a used car lot where they repair and sell old cars. Through an educational foundation, local high tech companies contributed equipment for a state-of-the-art robotics laboratory for the technical high school, and then worked with educators to write the curriculum.

Western New York is considered by many experiential education experts as a pioneer in high school internship programs. As a result of private industry initiative, the Buffalo City School District and the Erie County #1 Board of Cooperative Educational Services (BOCES) got together to plan and implement the program. It started in 1969 with 12 high school seniors, all of whom volunteered for special work assignments with Buffalo area employers. Now hundreds of students are served annually by the Action Learning Internship Program and its popularity continues to grow.

Human Resources

Corporate-education pairings can be categorized in several program types. Frequently, businesses volunteer to provide tutors in basic skills for disadvantaged students or mentors to offer educational challenges to gifted youth. In both these partnerships, firms donate the time of their employees on a regular basis so they can develop a relationship with the students they help. Not only do students receive needed one-to-one attention, they also learn how basic skills are used in the workplace.

Other kinds of programs that emphasize industry's human resources include inviting principals and teachers to company-sponsored management seminars and technical advancement courses. The result is better run schools and teachers with up-to-date knowledge. Several school systems cite large cost savings that came from implementing recommendations from local businesses who conducted efficiency studies in the schools.

Some businesses contribute money to schools through foundations, or donate equipment or services. Computers, science lab equipment, printing services, grants to teachers to carry out special projects and awards to exceptional teachers are but a few possibilities.

John Bennett, Executive Director of the New York State Superintendents Association, has encouraged local level superintendents to seek out creative and innovative approaches. One direction partnerships took in New York is for businesses to hire teachers during the summer, either to work alongside specialists using skills the teacher teaches during the year — a math teacher paired with an engineer, for example — or to give the teachers experience in the local industries that students will likely enter after graduation.

Lately, Education Secretary William Bennett and others have talked of raiding industry or looking to retirees for science and math teachers and school administrators. The merits of such an approach could be tested by bringing retirees or corporate professionals into the classroom to work alongside teachers or to act as consultants, much as retired business owners now do for struggling small businesses in the Service Corps of Retired Executives (SCORE). Such a school-based program

could be called Retirees and Professionals Teaching (RAPT).

Principles for Success

Whatever programs emerge from educational-industrial links, several important principles remain. According to a study in Fairfax County, Virginia, by education researcher Judy Kalish, these programs should enrich the school curriculum, not dominate it; each cooperative effort needs realistic and concrete objectives, with tasks apportioned to the entity best prepared to fulfill them; and finally, programs need an autmosphere of mutual respect and recognition of the assets that both bring to the partnership.

While many schools and businesses benefit from the enriched educational opportunities a partnership provides, some businesses and schools still sit on the sidelines. Particularly in small towns and rural areas, large high tech firms may not be available to donate sophisticated equipment. But local businesses may be able to help the schools in other ways not immediately apparent, especially if they pool resources. Larger firms in nearby cities, especially those employing parents of the school children, may also be enlisted to help out.

To succeed, a partnership must be supported at the highest level of the school system. Many states now have state partnership programs that help an individual system set up programs. Months of careful planning by the school staff is necessary before efforts can begin to recruit businesses. Even with the overall support of the business community, however, schools may need to initiate a public information program to sell a specific program to specific businesses. In some cases, business leaders have been invited to form a school-business study group that investigates and recommends avenues of cooperation.

Education Needs Corporate Help

Although businesses and schools have worked together for generations or more, schools today really need corporate help. Reductions in federal aid to schools is in some areas compounded by a drop in state or local funding as a result of economic conditions. Yet schools are pushed at the same time to improve educational quality, an effort that usually requires more money rather than less. For many schools, local businesses can prove to be an invaluable — and underutilized — resource.

Boston announced a unique partnership designed to combat the decline of their public schools, now with one of the highest dropout rates in the country: any public school graduate who wants to, will have money to go to college. Led by New England Mutual Insurance Company, 40 Boston firms pledged $6 million to ensure the funding was there for those who need it. This program is an extension of a project started by the insurance company several years ago. Last year, the average grant to students was over $500.

In addition to the college push, more than 350 companies guaranteed jobs for students after graduation. The city had a record 95 percent of last year's graduates either employed or in college. The business community also provided additional school guidance counselors to decrease the ratio of one per 400 students.

The school system, for its part, must lower the dropout rate and increase attendance and standardized test scores. Similar programs are now being developed in other cities across the country.

Meeting Other Community Needs

Several other factors are pushing schools into becoming more active "community education sites." Calls for additional educational opportunities particularly early childhood and adult continuing education programs have increased the demand for space in many communities. Glen Earthman, a facilities planning expert, states that with the skyrocketing cost of new construction and energy, it no longer makes sense to build a separate facility for each community need, especially when schools usually are empty evenings and weekends.

In addition, current interest in pre-primary and continuing education offers some school districts a constructive use of classrooms left empty due to declining enrollments. When school numbers begin to rise by the end of this decade, siting these programs may be more difficult.

Another sociological change driving schools to offer more to the community is the tendency — the necessity — for working adults to switch jobs and even careers frequently. Often these adults need refresher courses or vocational training, both of which can be offered through a continuing education program.

A final influence on community educational needs is the "graying of America." As has already been noted, the senior citizen group is the fastest growing segment of our population. Many retirees complete the education they were forced to abandon in their teens to go to work. Others learn new skills or seek intellectual challenges. More and more retirees are applying for college and graduate schools, attending classes with students in their 20s. Each age group can learn from the other's experiences and outlook, adding a new dimension to the courses for both.

The same benefits result if schools open up secondary classes to retirees, giving high school students a new perspective in education. Retirees, whose illiteracy rate is estimated at 30 percent, benefit from expanded opportunities to learn basic skills.

Recreational, cultural, and private sector programs are available using the community as a classroom.

Examples of Community Education

Experience has shown that the more community-minded a school is, the more community support it earns. Some additional examples of community education in action include:

Salem-Keizer, Oregon. This community school program, probably the biggest west of the Mississippi River, makes it possible for residents of all ages to use their schools during the day, evening, weekends, and vacations for educational, civic, cultural, social, and recreational activities. The district has 48 schools and 26 citizen advisory committees involving 2,000 individuals. Each school has a local school advisory committee which acts as a liaison between the community, principal, and school board.

During the 1985-86 schoool year, more than 70,000 children and adults participated in 726 recreational and educational programs with 90 percent of the instructors serving as volunteers. Now 16 years old, this endeavor started as a community recreation program with some attention given to adult education. Among the benefits of this program:

- A business "partnerships in education" program, co-sponsored with the Salem Chamber of Commerce, gives students and teachers a realistic picture of the business world and business people. Business people also develop an understanding of the educational system;
- Public and private agencies in Salem, supportive of community education, work cooperatively in areas such as child care;
- The program has increased feelings of public ownership and support of the school system;
- There is an apparent connection between the program and improvement in school attendance and test scores, and a decline in vandalism.

Durham County, North Carolina. This program operates on the philosophy that it must be financially self-sustaining and operate at no additional cost to the local taxpayers. Adult education is the foundation of the program because it brings the largest number of people into the schools. After the central office decides on fixed costs and sets salary guidelines, local community education school coordinators are responsible for operating within the budgets set for their programs. More than half of the evening classes are co-sponsored with other public and private agencies.

Rockwood, Missouri. Schools in this district present programs for all ages, from preschool to senior citizen activities. In its P.I.E. (Parents in Education) program, volunteers, or "partners," from business, government, universities, and cultural, service and health agencies, along with parents of the school system, share their expertise.

Regional advisory councils are used extensively. Each council serves a cluster of schools within a 2 to 3 mile area. Working with the councils are 11 community education coordinators who serve 18 schools with over 200 different programs. Also there are 4 district-wide coordinators who are responsible for programs such as P.I.E. and Early Childhood.

Falmouth, Massachusetts. In the early 1980's, Falmouth administrators sought ways to strengthen their ties to the community and increase parent involvement in the school. Simultaneously, Falmouth's community schools advisory council wanted to make the K-12 schools more open to community involvement. From the efforts of both groups emerged VIPS, Volunteers in Public Schools. VIPS has led to:

- Volunteers, many from internationally known scientific institutions, performing in-school tutoring, clerical work, enrichment activities, and mentorships with students;
- Internship opportunities for students in local businesses and public agencies with students performing necessary community services.

Aurora, Colorado. A middle school houses a branch of the city public library, a community recreation center, a three-room preschool and a meeting center for community groups. Not only does the school not close at 3 p.m., but the whole community gains a sense of belonging. The branch library also saved the school from installing separate library facilities in the school while giving the students quick access to any book in the city library system.

Increasingly in today's society, school is a place, not a dozen years of education. Education has become a lifelong process, and the schools are becoming lifelong learning centers.

F. WHAT PARENTS CAN DO

When analyzing educational shortcomings, most of the attention is focused on the schools. Yet the attitudes and atmosphere at home contribute significantly to a student's success or failure in school. If a student does not have a supportive home environment, the school may have a greater difficulty in fulfilling its educational mission.

In 1965, the Head Start program was instituted to address the lack of preparedness for school of children from poor families: these children lacked the basic learning skills typically possessed by other children entering school, skills learned at home. Head Start also deals with ancillary problems such as hunger and negative family environment that impedes learning once in school. Reports show the positive effects of Head Start often persist through high school and beyond.

Importance of Positive Attitudes

Recent studies addressing the success of Asian-American children over their white and black counterparts showed not only a greater amount of time spent on homework, but also fewer missed days of school. William Liu, a researcher at the University of Illinois, notes the Confucian ethic, which many Asian-American families subscribe to, teaches that family members should work for the honor of the family — and that includes school work. Studies also show more Asian-Americans believe hard work is the determining factor of success in school while white Americans credit talent.

Positive parental attitudes about the value of education can also be demonstrated by their interest and involvement in school. Anecdotal information suggests parents who volunteer in schools and who show an interest in who their children's teachers are and what the classes are doing, help their children by raising the teachers' expectations for the children's success. The Teacher Expectation of Student Achievement program began in California because it was discovered that negative teacher expectations of minority students adversely affected their success in school.

Finding Ways to Involve Parents

While in many families both adults work full-time, teachers and principals can find ways for parents to become involved. Some schools have programs that send exercises and drills home with lagging students designed to be done with a parent or older sibling. Parents can be invited into the school as aides, tutors, monitors or other support staff working alongside teachers.

For parents who may lack educational skills themselves, the school may need to take the initiative and communicate to them what good study habits are, how to create a study environment at home, how much and what the child should study. Parents may need to be told the value of various extracurricular activities and the importance of encouraging their children to belong to the school rather than just attend it.

Finally, some parents need to know that they can support their children's education on weekends and holidays with trips to museums, historical sites and geographic landmarks.

sources may also occur as an aging population seeks more sevices for the elderly.

Tapping Community Resources

Obviously, for schools to flourish they must be financially healthy. Businesses, which are a major source of revenue, must be considered a vital *community* resource by the schools. A number of surveys have shown that major factors influencing business on their site location decisions are:

- Availability of educated workers;
- State and local tax structure;
- Community attitude towards business;
- Cost of property and construction;
- Transportation;
- Proximity of good schools.

A local education system has a direct bearing on at least three of these factors.

Business-school linkages go back more than a century but seem to be experiencing a rebirth. President Reagan proclaimed 1984 "National Year of Partnerships in Education" as part of his private sector initiatives program. That year the U.S. Department of Education counted over 46,000 business-school relationships. Some examples:

- In Atlanta, more that 100 businesses "adopted" 50 schools;
- In Lousiana, chemists team-teach chemistry classes and engineers visit math classes. Both professions relate their job-site experience to the students;
- In Orlando, Fla., Disney World workers and local police are trained by the public schools.

School systems have several alternatives for raising funding levels, including the combining of several sources. Some localities have used a local sales tax, which is frequently supported by taxpayers when the revenues are dedicated to the schools. Other sources of income for school systems include donor funds and local educational foundations, and business-school partnerships to fund special projects or needs. Leasing school facilities and materials can also bring in additional money, while sharing activities and equipment with other agencies or organizations — like school buses or pools —cut the operating costs.

These examples suggest schools could be much more entrepreneurial — they might sell their services, rent out the school plant or vacated buildings.

In an address before NASBE five years ago, Fletcher L. Byron, chairman of Koppers Co. and chairman of the Committee for Economic Development, said "The business world has experts in every field who can act as adjunct teachers in the classroom."

He cited the Allegheny Conference, a civic association of Pittsburg businessmen, who had provided more than $750,000 in education support to local schools, including programs linking businesses with individual schools.

State education agencies can play major roles in promoting business-school partnerships and linkages. A state agency can serve as a clearinghouse, point to model partnership activities, and act as a broker between the state capitol and business capital in its effort to assure students of productive futures.

A Final Note

Without a doubt, the need is great and the responsibility just short of overwhelming. However, there is no more important cause in America today than the realities facing our educators and our policy makers. Education is the engine that will pull our societal train along the track into the 21st century. How heavy a load it can haul and how far it can go will be determined by the actions of those in policy making positions in all parts of the country and at all levels of the educational delivery system.

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National Association of State Boards of Education
701 North Fairfax Street, Suite 340, Alexandria, Virginia 22314

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